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A BUSINESS ANALYSIS OF THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION OF NATIONAL STOCK YARDS, ILL.

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As a part of its program of research in the field of cooperative marketing by producers of agricultural commodities, and at the request of the board of directors of the association, the Division of Cooperative Marketing of the Bureau of Agricultural Economics undertook a business analysis of the Producers Live Stock Commission Association of National Stock Yards (near East St. Louis), Ill.

The study was begun in March, 1927, and included as its principal features, analysis of the association's internal organization and operation, relation to its membership, and selling policies. Use was made of available records in the offices of the association and in the files of the Bureau of Agricultural Economics, together with information obtained through questionnaires and personal interviews with officers, employees, members, and nonmembers.

PURPOSE OF THE STUDY

It was the aim of the Division of Cooperative Marketing to bring together, through analysis of the records of the association, facts that might furnish a basis for an appraisal of the association's methods of conducting business. In this sense, the study may be regarded as an audit of the business practices and policies of the organization.

[1] Acknowledgment is made of the assistance of J. W. Jones in the interviewing of members and in the analysis of the results of the membership survey; also of the work of J. H. Lister in the collection of membership data and information at the association's office; and of Christine R. Schanck in the tabulation and analysis of data and in the preparation of this circular. The manuscript for this circular was completed before the Division of Cooperative Marketing was transferred to the Federal Farm Board Oct. 1, 1929.

The results of the study have enabled those managing the business of the cooperative association to see more clearly some of the problems confronting them, and have supplied facts and conclusions which will become the basis for suggestions to other cooperative livestock-marketing associations which are faced with similar problems.

PRINCIPAL RESULTS OF THE ASSOCIATION'S OPERATION

Since the first year of its operation (1922), the association has shown material increases in business. Commissions received on inbound business were more than doubled between 1922 and 1926. During the 6-year period 1922 to 1927, inclusive, a total of 495,744 head of cattle was handled by the association, 302,453 head of calves, 4,066,039 head of hogs, and 454,467 head of sheep. These totals include receipts of livestock for sale at National Stock Yards, purchases of livestock on members' orders, and livestock handled for yard traders. The livestock had a total sales value of $121,348,230.51.

Consistent support of the association by its shippers has been maintained. There is no contract or marketing agreement whereby the shipper agrees to ship all or any part of his livestock consignments to the association. Yet during the 5-year period, 1922–1926, almost 59 per cent of the commissions on inbound business was received from local shipping associations and individual shippers who had consigned shipments direct to the association continuously for all of the five years. An additional 12 per cent of the commissions was received from shippers who had consigned livestock to the association for four consecutive years during this period.

The association has been able to reduce the cost to its shippers of selling livestock. Because of the large volume of business consigned to it by member and nonmember shippers, operating costs have been so lowered that commission rates were reduced considerably below the general rates that prevailed at the National Stock Yards market. Operating costs have been lowered as the association has been able to operate on a reduced schedule of commission rates. During the first five years of operation, a total of $256,810.74 was refunded to members in patronage dividends. Thus, savings to members have been of two kinds, refunds on commissions paid and savings from reduced commissions.

The Producers Live Stock Commission Association was instrumental in the formation of stocker and feeder pools, whereby movement of range lambs and cattle direct to Corn Belt feed lots takes place. The immediate success of these stocker and feeder pools was marked because of the wide scope of their activity. The operation of these pools has been taken over by the National Live Stock Producers Association.

The association participated in the formation of the Producers Live Stock Credit Corporation, through which stockmen may take advantage of the facilities of the intermediate credit banks for livestock-feeding loans. Although no efforts have been made to hasten the development of this service, it has shown material growth since its organization in 1924. During 1927, loans totaling $408,528.21 were made through the credit corporation.

An organization including sales, yards, and office employees has been developed which is capable of functioning efficiently under the heavy peaks of business which occur at times throughout the year.

The association, in cooperation with the National Stock Yards Co., was able to obtain improvements in service on rail shipments of livestock to National Stock Yards.

A conservative policy is followed in building up a surplus, which may be used as a reserve during a period of lessened receipts, or for expansion of the organization in preparation for increased business, or for any of the purposes outlined for the use of this surplus in the by-laws of the association.

An active part has been taken by the association in the promotion of sales of calves from boys' and girls' calf clubs. The fourth of these sales was held in 1927, when calves from 16 Illinois and Missouri clubs were exhibited and sold.

BACKGROUND OF THE ASSOCIATION

The Producers Live Stock Commission Association was the first of the terminal livestock commission associations organized under the leadership of the National Live Stock Producers Association. Twelve of these agencies were operating in 1928.[2]

The origin of this movement centered in the American Farm Bureau Federation which called a meeting of farm organizations and stockmen's associations at Chicago, July 23 and 24, 1920. The representatives of the various organizations present at this meeting authorized the president of the American Farm Bureau Federation to call a meeting of those interested in livestock production and marketing. At this meeting, October 8, 1920, the president of the farm bureau was authorized to appoint a committee (afterwards known as the Committee of Fifteen) which should consider livestock marketing problems and prepare a report for the organizations which it represented. Further provision was made for a general conference to be called by the president of the farm bureau to act upon the report of the committee.

The Committee of Fifteen, together with six alternates, was appointed January 3, 1921. After a number of meetings of the committee, the general conference was called on November 19, 1921, for consideration of the report, the principal features of which were as follows.[3]

Establishment of the National Live Stock Producers Association.

Incorporation, establishment, and coordination of the work of terminal commission associations and stocker and feeder companies.

Encouragement of cooperative livestock shipping associations and assistance in making their work effective.

Study of the problems of livestock marketing, including the furnishing to producers, feeders and graziers, of information which will enable them to market their livestock more intelligently.

Consideration of transportation problems.

Extension of the market for meat.

With this program the National Live Stock Producers Association was granted a charter under the laws of the State of Illinois, December 21, 1921. The board of directors of the national association, acting under the adopted program, established the first terminal marketing agency on January 2, 1922. This was the Producers Live Stock Commission Association, incorporated under the laws of the State of Illinois and operating at National Stock Yards, East St. Louis, Ill.

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[2] These agencies are located at East Buffalo, N. Y., Chicago, Ill., Cincinnati, Ohio, Cleveland, Ohio, Detroit, Mich., Evansville, Ind., Indianapolis, Ind., Kansas City, Mo., National Stock Yards (East St. Louis), Ill., Peoria, Ill., Pittsburgh, Pa., and Sioux City, Iowa.

[3] FARMERS' LIVE STOCK MARKETING COMMITTEE OF FIFTEEN. REPORT OF FARMERS' LIVE STOCK MARKETING COMMITTEE OF FIFTEEN. NOV. 10, 1921. LIVESTOCK MARKETING PLAN ADOPTED BY THE LIVE STOCK RATIFICATION CONFERENCE. 20 p. [1921].

PURPOSE AND ORGANIZATION OF THE ASSOCIATION

The Producers Live Stock Commission Association is a complete business unit in itself, although it was organized under the auspices and guidance of the National Live Stock Producers Association acting in cooperation with other interested agencies. A uniform fee of 50 cents per single-deck car of livestock and 75 cents per double-deck car received for sale by each terminal association is paid into the treasury of the national organization for the maintenance of its work. The directors of each terminal agency elect one of their members as a director of the National Live Stock Producers Association. Thus the policies of the national organization are determined by the elected representatives of the terminal associations.

The Producers Live Stock Commission Association of National Stock Yards, Illinois, has as its primary purpose the promotion of better and more economical methods of producing and marketing livestock. Organized as a nonstock, nonprofit association, it is authorized to buy, handle, sell, and market livestock for its members and others. In accomplishing the purposes for which it was formed, it is empowered to cooperate contractually or otherwise with other associations or individuals conducting businesses of similar character. The reduction of speculation and waste in the marketing of livestock is an important aim of the organization. Numerous other powers are mentioned in the certificate of organization, but these are incidental to the accomplishment of the principal purpose—the promotion of better methods of production and marketing of livestock.[4]

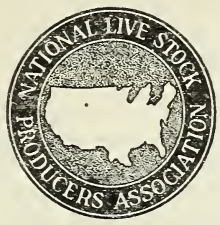
The association renders essential services in the marketing of livestock. A stocker-and-feeder buyer is provided for the convenience of members who wish to purchase stocker and feeder cattle and calves at the National Stock Yards market. The association provides sufficient help to yard, feed, and water livestock, to drive it to the scales after its sale, and to perform other necessary services. Salesmen are employed in all the principal and specialized branches of livestock selling. In field and educational work the association has cooperated with the National Live Stock Producers Association and, on its own initiative, has carried on work with individual shippers and with managers, boards of directors, and members of local shipping associations.[5]

Membership is limited to bona fide producers of livestock, both breeders and feeders. Membership may be granted to individuals, partnerships, local shipping associations, and corporations. The form of application for local shipping associations shown in Figure 1 is used by all the affiliated terminal commission agencies. The application provides for membership both in the National Live Stock Producers Association and in some one terminal association. A separate application must be made for each terminal commission association in which membership is desired. The outstanding feature of the application is that it implies no obligation or promise on the part of the applicant to consign any livestock to the organization. The intent is to leave it entirely optional with the member whether he ships any or all of his livestock to the commission agency of which

[4] For a complete statement of the purpose of organization of the association, see Article II, section 1, of the by-laws, which are given in complete form in the appendix.

[5] For a detailed discussion of the operation of a terminal livestock commission association, see the following publication: RANDELL, C. G. COOPERATIVE MARKETING OF LIVESTOCK IN THE UNITED STATES BY TERMINAL ASSOCIATIONS. U. S. Dept. Agr. Tech. Bul. 57, 112 p., illus. 1928.

he becomes a member. Any continuance of relationship between the organization and its members thus depends solely upon good will arising from satisfactory service rendered by the terminal association.



SHIPPING ASSOCIATION

Application for Membership

in the

National Live Stock Producers Association

and

....

(Insert name of Commission Agency)

The undersigned, as a duly authorized officer of the shipping association named below, and as Agent for the bona fide live stock producer members of such shipping association, hereby applies for memberships for such bona fide live stock producer members in both of the above entitled organizations, and, on behalf of such persons, agrees, if such applicants are accepted as members, to be governed by the by-laws, rules and regulations of such organizations.

This application is made with the understanding that memberships may be had by applicants in any other market agency under the jurisdiction of the National Live Stock Producers Association. Applicant agrees to make application for membership in such other market, before or at the time he consigns live stock thereto.

The undersigned, as agent for members of the shipping association named below, with the knowledge and consent of his Board of Directors, hereby authorizes the ---------- Commission Agency to deduct fifty cents (50 cents) for a three (3) year subscription to the National Live Stock Producer for each member each third year from earnings which may accrue to the credit of the respective members or from proceeds of sales of live stock which may be made for them.

(Name of Shipping Association)

(P. O. Address of Shipping Association)

By ---

(Name of duly authorized Officer)

Date ----------, 19----

NOTE: Mail application to Producer agency to which you apply for membership.

Applicant will not fill in this space above line

P. O. Address .....

Name .....

Mo. ..... Market .....

N. P. No. 49

(SIGN BELOW FOR NATIONAL OFFICE RECORD.)

The undersigned, as a duly authorized officer of the shipping association named below, and as agent for the bona fide live stock producer members of such shipping association, hereby applies for memberships for such bona fide live stock producer members in the National Live Stock Producers Association and.....Commission Agency, and, on behalf of such persons, agrees, if such applicants are accepted as members, to be governed by the by-laws, rules and regulations of such organizations.

This application is made with the understanding that memberships may be had by applicants in any other market agency under the jurisdiction of the National Live Stock Producers Association. Applicant agrees to make application for membership in such other market before or at the time he consigns live stock thereto.

The undersigned, as agent for members of the shipping association named below, with the knowledge and consent of his Board of Directors, hereby authorizes the----------Commission Agency to deduct fifty cents (50 cents) for a three (3) year subscription to the National Live Stock Producer for each member each third year from earnings which may accrue to the credit of the respective members or from proceeds of sales of live stock which may be made for them.

.....

(Name of Shipping Association)

.....

(P. O. Address of Shipping Association)

..... Date....., 19....

(Name of duly authorized Officer)

FIGURE 1.—FORM OF APPLICATION FOR MEMBERSHIP IN A TERMINAL COMMISSION ASSOCIATION AND IN THE NATIONAL LIVE STOCK PRODUCERS ASSOCIATION

Government of the association is vested in a board of seven directors, who are elected by the members and delegates from local shipping associations at the annual meeting held at the offices of the terminal association.[6] The directors hold office for a term of three

[6] See Articles V and XI of the by-laws, appendix.

years. Election of approximately one-third of the board membership takes place each year. The directors are so chosen that representation of the States and districts will approximate the volume of business contributed by them to the association. The same individuals have constituted the board membership since the organization of the association, in 1922, and their interest in the organization has been demonstrated by a high percentage of attendance at the regular quarterly board meetings.

The operating personnel of the association includes a manager, the necessary salesmen for selling the various species of livestock, adequate yard and clerical help, and representatives in the field. The three principal departments for inbound consignments of livestock handle cattle, hogs, and sheep, respectively. Each of these departments has its own salesmen and yardmen who sell, handle, and otherwise care for the animals during the time they are in the hands of the association. This care includes receiving the animals from the yard company, feeding, watering, sorting, and driving to the scales prior to weighing by employees of the yard company following sale of the animals. In addition, a stocker-and-feeder department is maintained for the convenience of stockmen who wish to purchase stocker and feeder animals on the market.

In the office a clerical force is necessary to prepare and mail account sales and returns, including the prorating of returns to shippers who have consigned their livestock together and who have requested the association to prorate the sales returns to the individual shippers. Certain members of the clerical force keep the financial records of the association, including the records of individual shippers' and local shipping associations' commissions, on which are based the patronage dividends, which are refunded annually to the members of the association.

The selling of livestock on commission calls for the payment of specified charges per car or per head on less-than-carload lots. The rates vary for the different species and for method of shipment. Somewhat higher commission rates are charged on shipments received by boat and by truck than on rail shipments that are consigned directly to the association for sale. At the close of the year's business, when the expenses of operating the association have been deducted from earnings, a refund or patronage dividend is authorized by the board of directors on the basis of the commissions which have been paid by members on consignments to the association. This refund in 1926 and 1927 amounted to 20 per cent of the commissions. It does not include the entire savings, as a portion of each year's savings is retained as a reserve fund for the association. There are further savings to the membership, as the association is operating on a reduced schedule of commission rates.

At the outset loans were required to enable the association to begin operation. These loans were soon liquidated, as the association was on a paying basis almost from the beginning of its operation. A reserve fund has been accumulated and is being increased from year to year.

The association does not engage in the extension of credit to stockmen, except that, together with the Chicago Producers Livestock Commission Association, it has invested some of its surplus in the Producers Live Stock Credit Corporation. Credit by this organization is extended only to feeders of cattle and sheep and is not intended to serve as a basis for the building up of herds and flocks for breeding

purposes. Notes given to this organization by stockmen are discounted by the Intermediate Credit Bank of St. Louis, Mo., when approved by the bank officials. Time limits of loans are six months for sheep loans and nine months for cattle loans, with the privilege of renewal for an additional three months. The interest rate to producers who borrowed from the credit corporation during the latter part of the year 1927 was 6 per cent.

RECEIPTS OF LIVESTOCK

ANNUAL RECEIPTS OF LIVESTOCK

Receipts of livestock by the association during the first six years of operation have shown a continuous growth in proportion to the receipts at National Stock Yards for all species of animals, although the rates of increase relative to market receipts have been maintained more consistently for calves and hogs than for cattle and sheep. (Table 1 and fig. 2.)

TABLE 1.—*Receipts of livestock at National Stock Yards and by the Producers Live Stock Commission Association, 1922–1927*

Livestock and year	Receipts by—			Livestock and year	Receipts by—		
	Market	Association	Association in percentage of market		Market	Association	Association in percentage of market
Cattle:	*Number*	*Number*	*Per cent*	Calves:	*Number*	*Number*	*Per cent*
1922	1,025,763	45,200	4.4	1922	374,570	19,433	5.2
1923	1,040,833	63,408	6.1	1923	358,076	32,967	9.2
1924	1,034,446	85,744	8.3	1924	350,180	45,707	13.1
1925	1,037,986	74,384	7.2	1925	406,266	55,951	13.8
1926	1,074,260	86,984	8.1	1926	452,018	71,221	15.8
1927	1,004,031	78,881	7.9	1927	444,362	76,189	17.1
Hogs:				Sheep:			
1922	3,605,520	371,689	10.3	1922	627,880	43,311	6.9
1923	4,831,181	686,386	14.2	1923	560,678	66,453	11.9
1924	4,579,538	829,056	18.1	1924	488,630	76,351	15.6
1925	3,512,007	668,611	19.0	1925	558,914	78,729	14.1
1926	3,535,986	689,852	19.5	1926	635,600	91,022	14.3
1927	3,710,104	794,381	21.4	1927	574,366	93,728	16.3

TABLE 2.—*Percentage distribution of commissions received from inbound business by the Producers Live Stock Commission Association, 1922–1926* [1]

State	1922	1923	1924	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Illinois	55.51	49.11	47.80	45.75	43.77
Missouri	39.49	41.89	40.36	43.39	45.83
Iowa	2.29	5.40	8.91	8.24	8.19
Tennessee	1.44	.75	.42	.53	.50
Arkansas	.61	.78	.31	.34	.23
Texas	.40	.90	1.18	.31	.29
Mississippi	.13	.54	.36	.10	.03
Kentucky	.05	.20	.20		
Indiana	.04	.02	.05	.03	.01
Alabama	.02				
Kansas	.01	.01	.04	.04	.03
Louisiana	.01	.13			.01
Oklahoma		.27	.36	1.23	1.06
Colorado				[2]	
Nebraska				.02	.05
New Mexico				.02	
Unknown			.01		
Total	100.00	100.00	100.00	100.00	100.00

[1] Commissions on inbound business, that is, shipments consigned to the association for sale, were used as a basis for this tabulation. Because of a lack of the necessary data, the distribution by States was based on post office addresses of shippers rather than on shipping points from which the consignments moved to National Stock Yards. Resulting variation is not of material significance.

[2] Colorado commissions were less than 0.01 per cent of the total for the year.

Receipts were obtained largely from the States of Illinois, Missouri, and Iowa. A percentage distribution of the commissions received by the association from the sale of animals consigned to it during the years 1922–1926 is shown in Table 2. Shippers in the three nearest States, Illinois, Missouri, and Iowa, paid, in 1926, over 97 per cent of the total commissions received by the association from the sale of livestock consigned to it. The remaining nine States contributed a combined total of less than 3 per cent of the commissions during 1926.

The relative importance of the three leading contributing States shifted somewhat during the five years, 1922 to 1926. Illinois commissions declined from 55.51 per cent of the total in 1922, to 43.77 per cent in 1926. Missouri commissions increased from 39.49 per cent in 1922 to 45.83 per cent in 1926. Iowa commissions increased from 2.29 per cent in 1922 to 8.19 per cent in 1926. When allowances

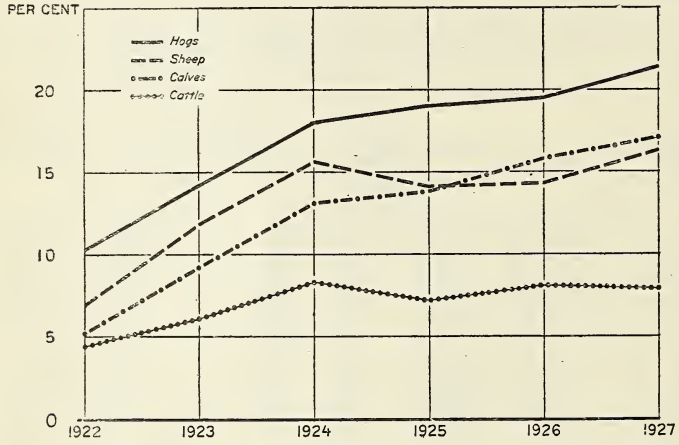


FIGURE 2.—PRODUCERS LIVE STOCK COMMISSION ASSOCIATION RECEIPTS IN PERCENTAGES OF NATIONAL STOCK YARDS RECEIPTS, 1922–1927

Association receipts of hogs and calves have shown a more definite rate of increase relative to total receipts at National Stock Yards than have receipts of cattle and sheep

have been made for the variations in commission rates charged on inbound business by the association in 1922 and 1923, actual commissions received from these States for the years 1922–1926 were as follows: Illinois, $61,210, $90,177, $109,737, $93,418, and $98,922; Missouri, $43,547, $76,925, $92,637, $88,596, and $103,592; Iowa, $2,523, $9,920, $20,441, $16,816, and $18,512.

The principal factor operating to bring about the relative decrease in commissions from Illinois is the increased use of the auto truck in livestock marketing. With the advent of improved roads many shippers within trucking distance of National Stock Yards have turned from rail shipments through local livestock-shipping associations and are consigning livestock by truck direct to commission agencies on the National Stock Yards market. Some of the business which formerly came through local shipping-association connections has been diverted to other commission agencies. The strength of the association as a marketing agency has been amply demonstrated, however,

by the retention of much of the business of individual members of weakened or discontinued local shipping associations in Illinois. This strength of the terminal association has been further shown by the increased business which has been derived from Missouri and Iowa. Among the factors contributing to this increase in business have been the field-service work done by the association, the lack in these States of trucking development to the extent observed in Illinois, and the presence, particularly in Missouri, of strong and efficient local shipping associations.

RECEIPTS OF LIVESTOCK BY METHOD OF SHIPMENT

Three general methods of shipping livestock to National Stock Yards are in use; shipment by rail, by truck, and by boat. The relative importance of each of these methods is indicated in Table 3, for the years 1922 to 1927.

TABLE 3.—*Percentage of livestock received at National Stock Yards and by the Producers Live Stock Commission Association, by method of shipment, 1922–1927*

Shipment method and year	Cattle and calves		Hogs		Sheep	
	National Stock Yards	Association	National Stock Yards	Association	National Stock Yards	Association
Rail receipts:	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
1922	98.2	93.9	97.4	93.8	95.6	92.4
1923	98.0	95.6	97.0	94.8	96.0	94.4
1924	97.9	95.2	96.5	94.9	95.6	93.3
1925	96.8	92.2	95.8	93.7	93.7	89.2
1926	95.8	91.1	93.5	92.7	92.6	87.8
1927	93.9	88.4	92.4	92.5	87.9	85.9
Truck receipts:[1]						
1922	1.2	4.0	1.0	1.5	3.2	3.7
1923	1.4	2.6	1.5	1.6	2.9	3.0
1924	1.5	3.6	2.0	2.2	3.3	4.5
1925	2.8	6.8	2.6	3.2	5.5	8.7
1926	3.9	8.2	4.8	4.7	6.8	10.5
1927	5.8	10.8	6.1	5.4	11.4	12.7
Boat receipts:						
1922	.6	2.1	1.6	4.7	1.2	3.9
1923	.6	1.8	1.5	3.6	1.1	2.6
1924	.6	1.2	1.5	2.9	1.1	2.2
1925	.4	1.0	1.6	3.1	.8	2.1
1926	.3	.7	1.7	2.6	.6	1.7
1927	.3	.8	1.5	2.1	.7	1.4

[1] Truck receipts include any animals driven to the stockyards.

The predominance of rail shipments is indicated for both National Stock Yards and the association. The percentage of total receipts for both the stockyards and the association indicates the increasing importance of livestock trucked in to the market, and the decreasing ratios of livestock received by boat.

The proportion of truck (or drive-in) receipts relative to National Stock Yards receipts was not maintained during the year 1927, except for hogs. The association receipts for each species, expressed as percentages of the total number received at the stockyards by each of the three methods of shipment, are shown in Table 4, which also shows the actual number of animals shipped by each method. The importance of the truck is again indicated by increases in the number of animals arriving at the market by truck. In 1922, 11,387 head of cattle were received by truck; in 1927, the number was 37,297

head. The number of calves increased from 11,444, in 1922, to 46,031, in 1927; hogs increased from 38,286 to 227,599; and sheep from 20,321 to 65,695.

TABLE 4.—*Receipts of livestock at National Stock Yards market, and by the Producers Live Stock Commission Association, by method of shipment, 1922–1927*

Live stock and year	Rail receipts			Truck receipts			Boat receipts		
	Market	Association		Market	Association		Market	Association	
		Total	Percentage of market		Total	Percentage of market		Total	Percentage of market
	Number	*Number*	*Per cent*	*Number*	*Number*	*Per cent*	*Number*	*Number*	*Per cent*
Cattle:									
1922	1,008,334	42,620	4.2	11,387	1,554	13.6	6,042	1,027	17.0
1923	1,024,889	60,958	5.9	10,149	1,178	11.6	5,795	1,272	21.9
1924	1,019,920	82,032	8.0	9,942	2,587	26.0	4,584	1,125	24.5
1925	1,017,516	69,952	6.9	16,854	3,531	21.0	3,616	901	24.9
1926	1,044,241	80,630	7.7	26,613	5,557	20.9	3,406	797	23.4
1927	963,842	71,084	7.4	37,297	6,994	18.8	2,892	803	27.8
Calves:									
1922	360,977	18,080	5.0	11,444	1,057	9.2	2,149	296	13.8
1923	346,378	31,201	9.0	9,499	1,263	13.3	2,199	503	22.9
1924	336,940	43,069	12.8	11,486	2,139	18.6	1,754	499	28.4
1925	380,860	50,189	13.2	23,839	5,336	22.4	1,567	426	27.2
1926	417,528	63,452	15.2	33,142	7,396	22.3	1,348	373	27.7
1927	396,993	66,072	16.6	46,031	9,710	21.1	1,338	407	30.4
Hogs:									
1922	3,510,988	348,653	9.9	38,286	5,685	14.8	56,246	17,351	30.8
1923	4,685,313	650,608	13.9	73,055	11,106	15.2	72,813	24,672	33.9
1924	4,419,438	786,957	17.8	92,309	18,381	19.9	67,791	23,718	35.0
1925	3,364,406	626,383	18.6	90,622	21,413	23.6	56,979	20,815	36.5
1926	3,305,686	639,681	19.4	170,424	32,437	19.0	59,876	17,734	29.6
1927	3,428,646	735,101	21.4	227,599	43,186	19.0	53,859	16,094	29.9
Sheep:									
1922	600,101	40,015	6.7	20,321	1,604	7.9	7,458	1,692	22.7
1923	538,585	62,725	11.6	16,136	1,992	12.3	5,957	1,736	29.1
1924	467,339	71,255	15.2	16,576	3,465	20.9	4,715	1,631	34.6
1925	523,845	70,198	13.4	30,557	6,866	22.5	4,512	1,665	36.9
1926	588,496	79,913	13.6	42,950	9,580	22.3	4,154	1,529	36.8
1927	505,073	80,549	15.9	65,695	11,926	18.2	3,598	1,253	34.8

The association's receipts of livestock in percentages of the number received at National Stock Yards by each method of shipment are shown graphically in Figure 3.

The diminishing ratios are not a matter of the past two years only. The highest percentages for the association's drive-in cattle receipts were reached in 1924. The percentage of drive-in calves received by the association was higher in 1925 than in either 1926 or 1927. Association receipts of trucked-in hogs were 23.6 per cent of the total market trucked-in receipts of hogs in 1925 and declined to 19 per cent in 1926 and 1927. Sheep trucked-in receipts of the association were 22.5 per cent of the total market trucked-in receipts in 1925 and have shown a percentage decrease in each of the two following years.

THE TRUCK AND THE LOCAL SHIPPING ASSOCIATION

One of the problems confronting the managements of many cooperative terminal associations and of the Producers Live Stock Commission Association is that of aiding in the maintenance of local shipping associations in territory within trucking distance of the terminal market. In Figure 4 are shown the number of drive-in (mostly trucked-in) hogs received from Illinois counties in the years 1923 and 1926. The increased density of the dots on the 1926 part of the figure indicates the extent of the development of this method of shipment and the areas particularly affected by the truck movement of hogs.

Some members who formerly consigned with others in rail shipments now haul their own stock, or hire commercial truckmen to haul it for them, direct to National Stock Yards. Wherever improved roads which permit truck movement of livestock have been developed, the local shipping associations within the area have been affected. In some of the counties within trucking distance of National Stock Yards, some important changes in the local shipping-association business have taken place. The volume of this business has decreased materially, both in dollars and in total commissions received by the terminal association from business arising in these counties. At the same time the consignments from individual members and from nonmember shippers have increased. Many of the shippers who previously consigned through local shipping associations now appear as direct consignors of livestock to the terminal association,

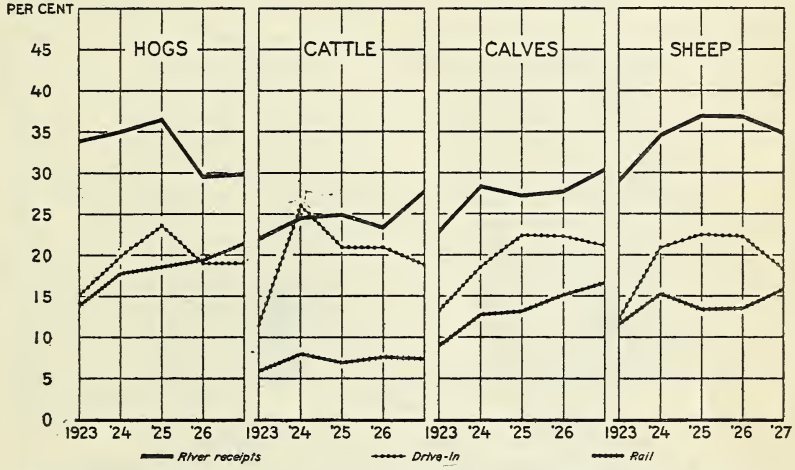


FIGURE 3.—RECEIPTS OF ANIMALS BY THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION IN PERCENTAGES OF NUMBER RECEIVED AT NATIONAL STOCK YARDS BY THE INDICATED SHIPMENT METHODS, 1923–1927

"Drive-in" receipts consist almost entirely of trucked-in animals. Decreases in the percentages during the last two years of the period are shown for all trucked-in animals with the exception of hogs. Rail shipments of hogs, calves, and sheep show material increases

without going through the local shipping associations which they formerly used.

The association has given attention to the development of the trucked-in business and must continue to keep pace with this rapid development. Progress is being made in the use of a form of bill of lading for use by shippers who patronize commercial truckmen. The necessity for a consignment record which would insure the shipment's reaching the intended sales agency and in a manner which would permit of proper identification of animals on the basis of markings, has long been apparent in the field of truck shipment. Although compulsory use of such a form is not now possible, the advantages are obvious, and it is being used in increasing numbers by truck shippers of the association. One of the principal benefits to be derived is the crediting of the shipment to the correct shipper. Slack methods of indicating ownership and of stating owners' names by truckmen

have created great difficulty in identifying the shippers of some consignments. Such happenings are likely to cause friction, although the association is not at fault.

The truck will continue to cause changes and readjustments in marketing connections as roads are improved and trucking services are extended. It is obvious that the truck is here permanently, and that provision must be made to adapt it to the needs of the livestock shipper and the cooperative terminal association. The methods are not altogether clear. Adequate facilities for handling trucked-in shipments, both in the yards and in the office, are means of obtaining trucked-in business. Shipping associations might own their own trucks or have under contract trucks owned by their members. The importance of the local shipping association to the terminal association

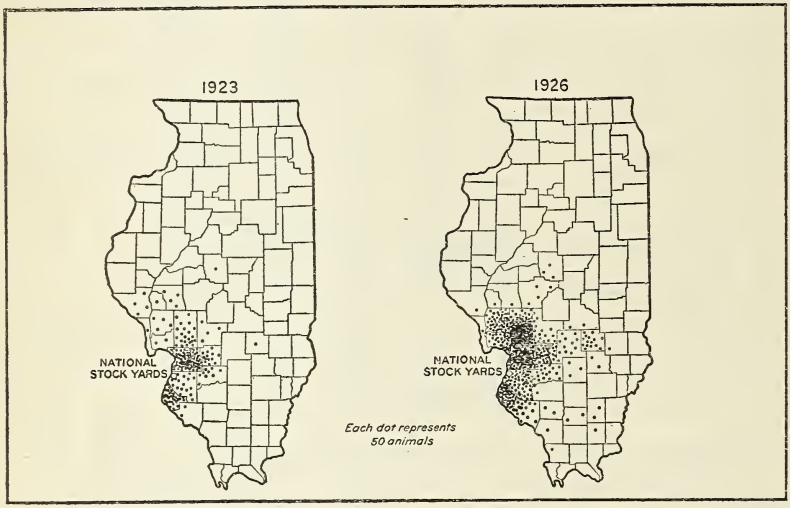


FIGURE 4.—COMPARISON OF THE NUMBER OF DRIVE-IN HOGS ORIGINATING IN ILLINOIS HANDLED BY THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION DURING 1923 AND 1926

The increase between 1923 and 1926 in the number of hogs trucked in from Illinois counties and the increased distance from which truck shipments were received are evident

and the importance of the truck as a factor in marketing suggest that all terminal agencies should actively aid locals to work out methods of adapting the truck to the particular needs of each organization.

EFFECT OF PRICE CHANGES ON MONTHLY RECEIPTS OF HOGS

The percentage of the total receipts of hogs at National Stock Yards received by the association is somewhat greater at times of declining or low prices than at times of high prices. Similar situations have been found to exist in the cooperative marketing of commodities other than livestock.

Some light is thrown on the situation by replies obtained in interviews by representatives of the Department of Agriculture with 91 shippers who consigned all or part of their livestock to cooperative sales agencies. Of these shippers, 30, or about 30 per cent of the total number, made use of local buyers or private commission agencies in addition to terminal cooperative sales agencies.

There seemed to be a definite disposition on the part of some shippers to patronize local buyers or other private agencies at times of advancing prices. At times of declining prices there was a tendency to consign to the terminal cooperative association, because of lower prices offered by local buyers or because of their temporary withdrawal from operation.

This situation is not peculiar to the marketing of livestock, but is also found in varying degree in the cooperative marketing of many other commodities. Generally speaking, cash buyers or local buyers are most active at times when prices are advancing. Buyers will frequently offer a premium over current prices, in order to purchase hogs which they expect to sell later on a higher market. Some hog raisers sell to these operators at such times, in the belief that they are making better sales than they will if they retain marketing control of their animals until they reach the central market. As a matter of fact, if they retain marketing control they have opportunity to benefit by any advance in price which may take place and they retain for themselves a portion or all of the local buyer's margin of handling cost and profit. These producers ship cooperatively at times of declining prices when local buyers can not make favorable offers, as the opportunities for speculative gain by local buyers are less on weak or declining markets than on strong and advancing markets.

The association is gradually improving this condition through actual demonstration of ability to handle hogs at all times, and through educational work carried on by its field service and by the National Live Stock Producers Association. Bringing about improvement is a problem of education and demonstration through actual service which must be regarded as a long-time program. Much progress has been made, and further work is being planned and carried into effect.

VARIATIONS IN DAILY RECEIPTS OF LIVESTOCK

In addition to the wider variations in the receipts of hogs from month to month, there were greater variations in the daily receipts of hogs by the association than in total receipts at the National Stock Yards market. Table 5 and Figure 5 bring out the fact that the movement of hogs to the association is more unevenly distributed on the various days of the week, on the average, than are receipts at National Stock Yards as a whole.

TABLE 5.—*Percentage of average weekly receipts of hogs received each day by the Producers Live Stock Commission Association and by National Stock Yards, 1925 and 1926*

Day	National Stock Yards		Association	
	1925	1926	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*
Monday	20.2	21.2	12.1	12.6
Tuesday	21.4	20.6	25.6	25.1
Wednesday	22.3	20.5	26.7	24.8
Thursday	14.5	15.5	14.9	16.5
Friday	15.8	16.2	16.5	16.5
Saturday	5.8	6.0	4.2	4.5
Total	100.0	100.0	100.0	100.0

A similar comparison of cattle receipts by the association and at National Stock Yards was made for the years 1925 and 1926. The results of this comparison are shown in Table 6 and in Figure 5.

TABLE 6.—*Percentage of average weekly receipts of cattle received each day by the Producers Live Stock Commission Association and by National Stock Yards, 1925 and 1926*

Day	National Stock Yards		Association	
	1925	1926	1925	1926
	Per cent	*Per cent*	*Per cent*	*Per cent*
Monday	32.7	30.3	16.0	14.9
Tuesday	27.6	28.5	37.2	35.8
Wednesday	19.9	20.8	27.2	27.7
Thursday	11.4	11.9	13.8	16.2
Friday	5.7	6.2	5.2	5.0
Saturday	2.7	2.3	.6	.4
Total	100.0	100.0	100.0	100.0

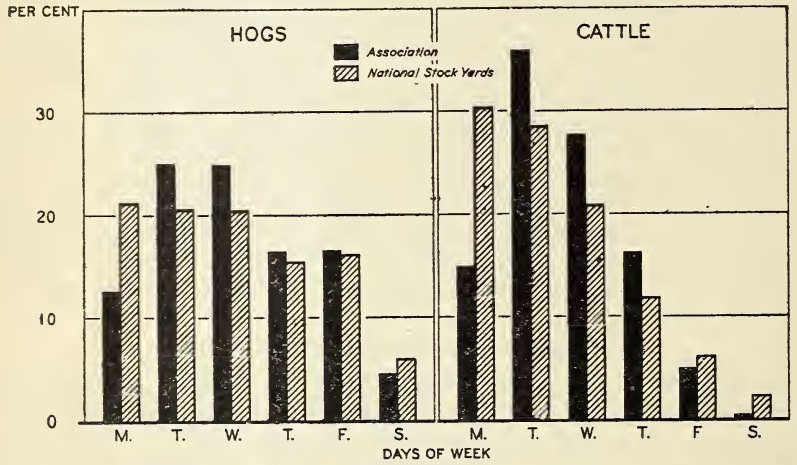


FIGURE 5.—DAILY RECEIPTS OF HOGS AND CATTLE BY THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION AND NATIONAL STOCK YARDS IN PERCENTAGE OF WEEKLY RECEIPTS, 1926

Daily variations in receipts of hogs and cattle were greater for the association than for National Stock Yards

Again there was a variation in the relative receipts for the association and for the National Stock Yards market. The explanation is evident. The association receives a relatively larger proportion of the business of local shipping associations than does the market as a whole. As most of the consignments from shipping associations arrive on Tuesdays, Wednesdays, or Thursdays, the receipts of the agency on these days are relatively larger than those of the market. Receiving a proportionately larger volume of business on these days is probably an advantage to the association, since more buyers are attracted to the pens of agencies that have a large volume of business.

MEMBERSHIP RELATIONS

The dependence of the association upon the good will of its shippers, without the formality of a contract or understanding of any kind by

which the shipper agrees to consign his livestock to the organization, prompted a study of changes in the membership, of the degree of consistency with which members had consigned livestock to the association, and of other indicators of the attitude of shippers toward the association.

NUMBER AND TYPE OF MEMBERS

One of the tests of the degree of success attending a cooperative effort is turnover of membership and the extent to which the members continue to affiliate with the organization. Accordingly, attention was devoted to the membership problem, but research was hampered because the data regarding its shippers, both members and nonmembers, were limited.

As the livestock cooperative does not use any legally binding contract or shipping agreement between the member and the association, which is customary in most cooperative associations, shipper morale is dependent entirely upon good will built up through efficiency of operation, and through service which appeals to the shippers of the association; hence the extent to which the membership had continuously supported the association is particularly important.

Members of the organization may be grouped in four broad classifications—(1) local shipping associations, (2) individual members, (3) partnerships, and (4) corporations. When measured by volume of business, the local shipping-association group is the most important. In 1926, 74.8 per cent of the commissions paid to the association by shippers who had consigned livestock to it for sale was received from local shipping associations; 73.7 per cent came from individual members. During the same year, commissions from members other than local shipping associations amounted to 19 per cent of the total commissions received by the agency, exclusive of stocker and feeder earnings and commissions received from yard-trader transactions.

The number of active member and nonmember shippers for each of the five years, 1922 to 1926, was determined, approximately, from the only available records—those maintained for the purpose of refunding patronage dividends. (Table 7.) It should be kept in mind that, during this period, local associations were losing some members' consignments because of direct shipment to market by truck. At the same time the number of shippers consigning direct to the terminal agency was increasing, because some of the former members of local shipping associations were consigning their livestock direct to the terminal association.

TABLE 7.—*Number of active shippers to the Producers Live Stock Commission Association, 1922–1926* [1]

Year	Local shipping associations			Shippers other than local shipping associations		
	Members	Non-members	Total	Members	Non-members	Total
	Number	*Number*	*Number*	*Number*	*Number*	*Number*
1922	274	22	296	1,537	980	2,517
1923	340	12	352	2,542	1,023	3,565
1924	361	18	379	2,959	1,703	4,662
1925	333	28	361	2,370	3,412	5,782
1926	314	34	348	2,458	4,710	7,168

[1] Based on the association's records maintained for the purpose of refunding patronage dividends.

CONTINUITY OF SHIPPER PERFORMANCE AND RELATIVE IMPORTANCE OF SHIPPER GROUPS

In any cooperative association, a question of first importance is the degree of continuity of shipping performance of the shippers. Accordingly, an analysis was made of the length of the period during which each shipper had consigned livestock to the terminal association. This work was difficult because of questions arising in the identification of each shipper's record from year to year. The identity of some shippers was probably lost because they shipped at times through local shipping associations and at other times as individuals, but the number is undoubtedly small. Their identification would have increased the number of shippers in the groups showing longer continuity and would have reduced the numbers in the groups with the shorter continuity. Nevertheless, results were obtained from the analysis which are measures of the continuity of shipping performance by shippers of the association, and which are indicative of the relative importance of the various groups when analysis is based on the volume of business derived from the different groups.

The shippers were grouped into two principal classes—(1) local shipping associations, and (2) shippers other than local shipping associations. Each of these groups was subdivided into member and nonmember classes and again into classes indicative of the years each shipper had consigned livestock to the association. Shippers consigning for the five consecutive years, 1922–1926, were placed in one class; 4-consecutive-year shippers, 1922–1925 and 1923–1926, were placed in another class; and 3-consecutive-year shippers were grouped together. Other groups were of those shipping two consecutive years, single years, four nonconsecutive years, three nonconsecutive years, and two nonconsecutive years. The relative volumes of business contributed by these various groups are shown in Table 8 and Figure 6.

TABLE 8.—*Percentage of total commissions from inbound business received by the Producers Live Stock Commission Association from members, and nonmembers, grouped by continuity of shipping performance, 1922–1926* [1]

Period	Local shipping associations			Shippers other than local shipping associations			Total
	Member	Non-member	Total	Member	Non-member	Total	
Years	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Five consecutive	55.31	.02	55.33	3.32	0.07	3.39	58.72
Four consecutive	9.09	.01	9.10	2.87	.08	2.95	12.05
Three consecutive	4.32	.01	4.33	2.55	.24	2.79	7.12
Two consecutive	2.12	.23	2.35	2.94	.69	3.63	5.98
One year only	1.15	.18	1.33	3.98	2.41	6.39	7.72
Four nonconsecutive	1.82	.03	1.85	.69	.06	.75	2.60
Three nonconsecutive	.56	.05	.61	.94	.13	1.07	1.68
Two nonconsecutive	.22	.04	.26	1.01	.25	1.26	1.52
Unknown [2]				2.50	.11	2.61	2.61
Total	74.59	.57	75.16	20.80	4.04	24.84	100.00

[1] Commissions received from stocker and feeder sales and from traders are not included in the 5-year total of commissions.

[2] Members whose cards were included in this group could not be identified from year to year so as to determine the continuity of their shipping performance. As the commission paid by the group is small, it could not affect the results indicated by the principal groups.

Of the total commissions for the period 1922–1926 (exclusive of stocker and feeder earnings and commissions collected from yard traders), 58.72 per cent was paid by shippers who had consigned livestock to the association for each of the five consecutive years. A little over 12 per cent came from shippers who had consigned for four consecutive years. In the latter group, such shipments may have been made during the four years, 1922–1925 or 1923–1926. Almost 71 per cent of the commissions received from inbound business came from shippers who had consigned for four or more consecutive years.

Some additional information on the question of membership turnover was obtained from a study of the number of shippers for the year

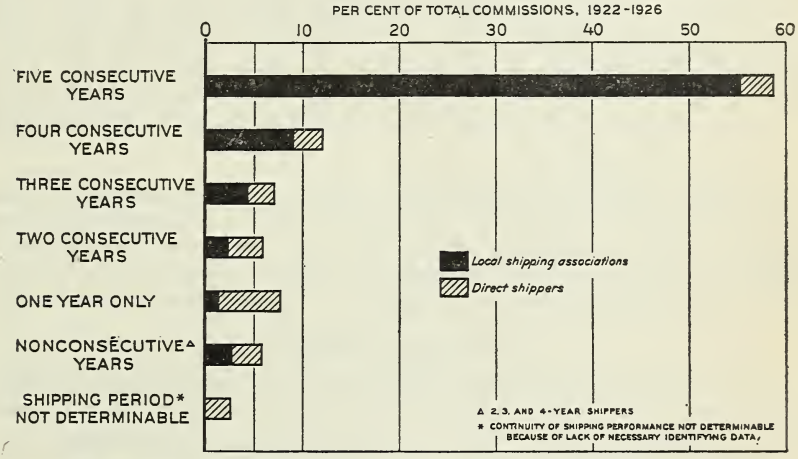


FIGURE 6.—COMMISSIONS PAID TO PRODUCERS LIVE STOCK COMMISSION ASSOCIATION

This figure represents commissions paid by shippers who consigned during the periods indicated at the left of the bars. Shipping associations and individual shippers who consigned their livestock directly to the association for five consecutive years paid almost 59 per cent of the total commissions received by the association from the sale of inbound consignments during the 5-year period, 1922–1926

1926. This study was based on the number of shippers who had consigned livestock rather than upon the volume of business contributed by each of the groups. Results of the analysis are presented in Table 9. Of the 348 local shipping associations, 47.41 per cent were 5-consecutive-year shippers and 14.66 per cent 4-consecutive-year shippers. Thus more than 62 per cent of the shipping associations had shipped four consecutive years or longer. In the direct-shipper group, only 5.52 per cent of the total number of member and nonmember shippers consigned livestock direct to the association for five consecutive years. A total of 10.17 per cent of the direct shippers consigned for four or more consecutive years. Almost 51 per cent of the direct shippers consigned for one year.

TABLE 9.—*Shippers who consigned livestock to the Producers Live Stock Commission Association during 1926, classified by continuity of shipping performance, 1922–1926*

Period	Local shipping associations				Shippers other than local shipping associations			
	Members	Nonmembers	Total	Percentage of total	Members	Nonmembers	Total	Percentage of total
Years	*Number*	*Number*	*Number*	*Per cent*	*Number*	*Number*	*Number*	*Per cent*
Five consecutive	164	1	165	47.41	363	33	396	5.52
Four consecutive	51		51	14.66	283	50	333	4.65
Three consecutive	28	1	29	8.33	338	187	525	7.32
Two consecutive	27	7	34	9.77	344	695	1,039	14.50
One year only	15	22	37	10.63	366	3,285	3,651	50.93
Four nonconsecutive	15	1	16	4.60	162	40	202	2.82
Three nonconsecutive	7	2	9	2.59	216	120	336	4.69
Two nonconsecutive	7		7	2.01	227	237	464	6.47
Unknown					159	63	222	3.10
Total	314	34	348	100.00	2,458	4,710	7,168	100.00

The large number of nonmember shippers who consigned for one year only may be explained in part by the use of the truck for direct shipment to National Stock Yards, which resulted in the loss of shippers by local shipping associations within trucking distance of the market and in an increase of direct consignors to the terminal association.

ATTITUDES OF SHIPPERS

In the course of the department's studies of cooperative organizations it has been found that considerable information can be gained from interviews with members. Accordingly, 117 shippers were interviewed during this study. Particular attention was paid to the reasons given by livestock producers for the selection of the sales agency which they patronized; reasons for apportioning shipments between cooperative terminal associations and privately owned commission companies, local buyers and other agencies; and ideas regarding further improvements in marketing methods.

The patrons of the association and others who were interviewed lived in Howard County, Mo., and in Adams, Macoupin, Fayette, and Morgan Counties, Ill. In addition to members of the association and of member local shipping associations, a few individuals who did not consign their livestock to cooperative associations were interviewed to learn their reasons for patronizing other sales agencies.

The results indicate the features of the association which its members believe are beneficial. Opposing viewpoints were also brought out, which the cooperative livestock sales agency must meet in a manner satisfactory to the shipper before he will consign his livestock to the agency. Many of these points of view may be wrong, but if the shipper believes himself to be correct the cooperative's necessity in the matter is clear. The shipper's information regarding the association must be broadened, thus giving him opportunity to base his opinions on a foundation of more complete and accurate knowledge regarding the organization.

Of the 117 shippers interviewed, 91 stated that they shipped part or all of their livestock to cooperative commission agencies, either through local shipping associations or as individual consignors. The

26 remaining shippers patronized local buyers or private commission firms or divided their patronage between these two types of agencies. A study of the methods used by the 117 shippers indicated a pronounced tendency to use more than one type of sales agency.

Ninety-one of the shippers made use of local shipping associations, but only 38 shipped exclusively through them. The remaining 53 shippers used other methods of sale; 23 shippers consigned livestock, at times, direct to terminal commission association sales agencies, 2 sold to local buyers, 2 to local buyers or through private commission firms, 13 consigned to private commission firms and to cooperative terminal associations, 11 marketed through local buyers, private commission firms, and cooperative sales agencies direct, and 2 shippers sometimes patronized private commission firms.

Replies of the 117 shippers indicated that 62 consigned exclusively to cooperative sales agencies, either direct or through local shipping associations, 22 consigned or sold to private agencies only, and 33 divided their shipments between the cooperatives and private sales agencies.

In answer to a question as to why they shipped to a cooperative sales agency exclusively, the 62 shippers in this group gave the following replies:

	Number of shippers replying
Better service and better prices	26
Farm bureau organized agency and it is a farmers' organization	16
Local shipping association ships there	14
Cooperative commission association as satisfactory as any	2
Cooperative commission agency needed at the terminal market	1
No reply to question	3
Total shippers who consigned exclusively to cooperative sales agency	62

Twenty-two interviewed shippers consigned their livestock exclusively to private commission firms, either directly or through a local buyer. Some of the reasons were stated as follows: "Better service and better prices," "Neighbor employed with private commission firm," "Service of cooperative commission agency not satisfactory." It was not determined whether there was sufficient evidence for these opinions.

Thirty-three shippers divided their consignments of livestock between cooperative commission agencies and private sales agencies. An analysis of the replies to a question regarding this division of shipments showed the following reasons:

	Number of shippers replying
Cooperative agency's business too heavy for satisfactory service	8
Private commission firms obtain better prices	5
Friends employed by private commission firms	5
Local shipping association ships to terminal cooperative association	5
Have no choice. One is as good as another	3
Private commission firms are more successful in selling small lots, including truck consignments	1
Cooperative agency on one market unsatisfactory; all right at another market	1
Influence of truckmen	1
No reply	4
Total number of shippers, who divided their livestock consignments between cooperative sales agencies and private commission firms	33

Fourteen, or over 40 per cent of these shippers, thus indicated a distinct lack of confidence that the cooperative sales agency was able to render as good service as the private agency. Of these 14 shippers, 8 believed that the cooperative commission association's business was too heavy for satisfactory service, 5 thought that the private commission firm could obtain better prices for livestock consigned to it for sale, and 1 thought that the private sales agencies were more successful in handling small lots of livestock than the cooperative sales agency.

These replies suggest to the association a wide field of educational work in convincing shippers of its ability to do the things which are expected of a livestock sales agency.

A question designed to determine what farmers think or how much they know about terminal marketing brought, for the most part, negative results. No significant suggestions were given. Of the six shippers who made definite suggestions, five thought that the proceeds from sales might be returned to shippers more quickly. Other replies to this question were "None" or "Don't know."

It was believed that the attitude of farmers toward general farm organizations might be reflected to some extent in their patronizing of cooperative sales associations. Replies to a question as to whether the shipper was a member of a general farm organization seemed to indicate that there was some relationship between membership in a general farm organization and the patronizing of a cooperative commission agency. (Table 10.)

TABLE 10.—*Shippers grouped by membership or nonmembership in general farm organizations*

Sales agency patronized	Members of a farm organization	Nonmembers of a farm organization	Total
	Number	*Number*	*Number*
Cooperative sales agency	45	17	62
Cooperative sales agency and private sales agency	23	9	32
Private sales agency	7	15	22
Total	75	41	116

About three-fourths of the cooperative sales agencies' shippers were members of a general farm organization. The opposite was true in the case of shippers who patronized private sales agencies only. About 70 per cent of these were not members of a general farm organization.

It is important from the standpoint of the association to know what the managers of local shipping associations think about its operations and the services it renders, for it is within the power of these managers to exert a considerable influence regarding the sales agency to which the livestock shipments from their associations are to be consigned. Ten local shipping-association managers were interviewed with regard to the functioning of this terminal association.

In reply to a question as to improvements which could be made in the association, various ideas were expressed. Two managers thought no improvement was necessary; the other eight either suggested minor improvements, to which the management of the terminal

organization is giving attention, or expressed viewpoints which were not in agreement with the facts as developed by a study of the functioning of the association.

The principal point brought out was the same as that emphasized by the interviews with shippers—the fact that whatever managers or other shippers believe to be the situation forms the basis for their actions, whether the beliefs are true or untrue. The problem is again one of education. Through publications and field-service work by the terminal association, managers and others should be given full access to the facts, in order that they may become convinced of the efficient operation of the association. If they believe in its efficiency, managers of shipping associations will attempt to direct all possible shipments to the terminal association and to meet incorrect opinions of their shippers with statements based upon correct information.

The problem of getting accurate information to the shipper is difficult, but is one which must be satisfactorily solved if livestock commission agencies are to show further gains. A satisfied shipper is an advertisement for the association. The development of shippers of this type should be carried on continuously through published material and through personal field work. Care is necessary to prevent this work from becoming too costly and to direct the work intelligently, so that the greatest benefit may come from the effort and expense involved.

To be effective, field work should be based on a previously determined need on the part of the shipper for assistance which the terminal association is in a position to give through its wider acquaintance with shippers' problems. The possibilities of this service are almost unlimited, provided the field service is backed by a statistical department to collect and analyze data concerning the individual shipper's problems as well as the problems confronting the livestock industry as a whole. In addition adequate analysis of data from areas where the association is making headway and from those areas in which progress is lagging will assist in the apportionment of field work to the various localities on the basis of the need for it.

From the standpoint of a long-time program for the association, the most advantageous field work will be based on direct contact of the personnel with shippers. The marketing of livestock has been based to a large extent on the principle of personal contact between the shipper and the sales agency, particularly in the case of large shippers. It seems probable that the same principle must be followed by the cooperative terminal sales association in building up its business pending the development of some other means of maintaining satisfactory contact.

Dissemination of accurate information regarding the association and its activities is a first requirement in the development of a loyal membership. It is the duty of the terminal association to see that members and prospective members are given first-hand sources of information by which they can gauge its efficiency and follow the development of its program and operations.

LOCAL SHIPPING ASSOCIATIONS

As about 75 per cent of the commissions paid to the association on livestock consigned to it came from local livestock-shipping associations, managers of all the local shipping associations which consigned

livestock to the terminal agency during the period 1922–1926 were mailed questionnaires regarding their business for the years 1923, 1924, 1925, and 1926, to determine how completely these locals were supporting the terminal association.

Replies, together with data from the records of the terminal association, furnished information through which it was possible to determine the extent to which those replying had supported this association and cooperative commission firms generally.

The results of an analysis of the replies of 136 associations regarding the proportions of their total 1926 business which were consigned to cooperative commission agencies on all markets are shown in Table 11. The approximate size of the shipping associations is indicated as well as the percentage of their total 1926 car-lot shipments, which were consigned to cooperatives.

TABLE 11.—*Percentage of the total 1926 business of 136 local shipping associations which was consigned to cooperative commission associations*

Livestock handled	Local shipping associations which consigned the indicated percentages of their total business to cooperative commission associations				Total
	1 to 25 per cent	25.1 to 50 per cent	50.1 to 75 per cent	75.1 to 100 per cent	
Carloads	*Number*	*Number*	*Number*	*Number*	*Number*
1 to 25	16	8	9	24	57
26 to 50	1	1	4	37	43
51 to 75		1	3	10	14
76 to 100				6	6
101 to 125			1	7	8
126 to 150				3	3
151 to 175				1	1
176 to 200			1	1	2
Over 200				2	2
Total	17	10	18	91	136
Percentage of total	12.5	7.4	13.2	66.9	100.0

The tendency of the group to consign over 75 per cent of its total shipments to cooperative commission associations is apparent. The smaller-sized shipping associations, those with shipments of less than 25 cars per year, showed a greater tendency toward consigning small proportions of total business to cooperative sales organizations.

Of the group of 91 local shipping associations, which consigned over three-fourths of their 1926 shipments to terminal cooperative marketing agencies, 60 locals, or more than 44 per cent of the 136 associations replying, consigned over 95 per cent of their total shipments to cooperatives.

One hundred and sixteen local shipping associations replied to a question relative to the number of cars consigned to National Stock Yards during 1926. The number of cars consigned to National Stock Yards, together with the number of locals sending varying proportions of their livestock to the association, are shown in Table 12.

TABLE 12.—*Percentage of the total 1926 business of 116 local shipping associations consigned to National Stock Yards and sold through the Producers Live Stock Commission Association*

Livestock consigned	Local shipping associations which consigned the following percentages of their National Stock Yards shipments to the Producers Live Stock Commission Association				Total
	1 to 25 per cent	25.1 to 50 per cent	50.1 to 75 per cent	75.1 to 100 per cent	
Carloads	*Number*	*Number*	*Number*	*Number*	*Number*
1 to 25	4	5	3	34	46
26 to 50	3	6	2	24	35
51 to 75	3	1	2	11	17
76 to 100			2	3	5
101 to 125	1		1	5	7
126 to 150				1	1
151 to 175					
176 to 200				1	1
Over 200		1		3	4
Total	11	13	10	82	116
Percentage of total	9.5	11.2	8.6	70.7	100.0

Eighty-two of the 116 local associations from which replies were received, or over 70 per cent, sold more than 75 per cent of their National Stock Yards consignments through this terminal association during the year 1926. On the basis of the total number of associations reporting from each State—21 in Iowa, 46 in Missouri, 49 in Illinois—61.9 per cent of the Iowa locals, 61.2 per cent of the Illinois associations, and 84.8 per cent of the Missouri associations were in the group which sold over three-fourths of their National Stock Yards consignments through this terminal association.

Evidently the local shipping associations were giving good support to the terminal agency. There is, however, the possibility of increasing the proportion of the total National Stock Yards business of these associations which is consigned to the Producers Live Stock Commission Association through closer relationship and better understanding between the terminal organization and the managers and boards of directors of the locals.

From the standpoint of the terminal association, continued support by local shipping associations is of primary importance, since about 75 per cent of its income from inbound business was received from this source during the five years 1922–1926. This business thus gives to the terminal the volume of business required for reducing its operating cost.

Although the advantages that accrue to the terminal association through its local shipping connections are of primary importance to it, the terminal agency is also important to the local shipping association. The advantage to the shipping association of having its livestock consignments handled by a sales agency, which has complete understanding and sympathy with the cooperative movement, can not be overestimated. The terminal association is in a particularly favorable position to be of service to the local associations from an advisory standpoint. It has a definite obligation to aid in the solution of the managerial problems that confront local managers and boards of directors. The continued growth of the terminal associa-

tion and the local shipping association is dependent upon the successful operation of both.

SALES ACTIVITIES

In the marketing of many agricultural commodities, the development of a merchandising program and of trade contacts is carried out over rather wide distribution areas. The activities of the sales organizations are not limited to single cities. This development is facilitated by the setting up of definite grades for the commodity and by the use of trade-marks, which identify the commodity in the channels of trade.

The conditions surrounding the sale of livestock, however, are different from those found in the marketing of some other important agricultural commodities. In so far as the livestock commission association is concerned, the receipt and sale of animals and the forwarding of returns to shippers require a few hours only.[7] Because of the nature of the commodity, little option is given the terminal livestock sales agencies as to time of sale. Sale usually follows close upon receipt of the animals at the market because of loss in condition and because of the expenses incurred in holding animals at the stockyards. Grain, cotton, and semiperishable fruits and vegetables enter into the channels of distribution in more leisurely manner, as their marketing may be distributed over a considerable period of time and over a large area by the marketing agencies handling them. A pool of returns from the sale of a single grade of a commodity may vary from a single shipment to the entire quantity of the commodity marketed by an association throughout its annual marketing season, whereas livestock returns are made to the individual shipper on the basis of the sales value of his individual shipment minus marketing expenses. The grades of many commodities are so well established that sales are made on the basis of established grades, whereas as yet the sale of livestock is carried out almost exclusively through actual inspection by the buyer or his representative.

The sales activities of the Producers Live Stock Commission Association have been limited to sale of stock to buyers or representatives on the National Stock Yards market. Variations in the daily and seasonal volumes of business have caused unequal demands upon the organization in the handling of livestock. Therefore, an analysis was made to determine, in so far as possible, answers to the questions which are foremost in shippers' minds: (1) Whether the sales organization of the association was able to sell to best advantage the livestock consigned to it, grade and condition being given due consideration, and (2) how it functioned under the varying volumes of business it was called upon to handle from time to time.

PRICES

Although the association records of sale of livestock contained information regarding the classes of animals sold, there were no nota-

[7] Under the packers and stockyards act it is required that "(a) Each market agency shall, before the close of the next business day following the sale of any livestock consigned to it for sale, transmit or deliver to the owner or consignor of the livestock a true written account of such sale, showing the number, weight, and price of each kind of animals sold, the name of the purchaser, the date of sale, and such other facts as may be necessary to complete the account." UNITED STATES DEPARTMENT OF AGRICULTURE, OFFICE OF THE SECRETARY. PACKERS AND STOCKYARDS ACT: 1921. U. S. Dept. Agr., Off. Sec. Cir. 156, Amendment 1, 3 p. [1924].

tions indicative of grades. Lack of grade notations is not peculiar to this association but is commonly found in sales records prepared by livestock sales agencies. This lack of grade records curtailed, to a very great extent, any study of the prices realized by the association for livestock sold by it. The Department of Agriculture has formulated systems for the grading of cattle, calves, and sheep and has suggested a system for the grading of hogs. Use of these systems of grading, to the extent that sale of livestock would be made strictly in accordance with the standards established and to the extent that association records of livestock sales would show the grade notations in addition to those of weight and price, would have made possible an extensive study of prices realized by the association in its selling of the several species of livestock. The lack of adequate sales records containing grade information thus greatly limited the scope of any study of prices obtained by the association for its shippers.

Some work was done with hog prices, however, in order to determine what conclusions might be developed from a study of the weights and prices noted on scale tickets. Prices for hogs were the only ones which held promise of being usable for analysis. A secondary reason for studying prices realized for hogs was that this is the most important species of livestock from the standpoint of commissions received by the association. The analysis of the sales of hogs was made for the period from May 9 to June 30, 1925.

It was not possible to identify satisfactorily the weights of the hogs accounted for on the scale tickets. Whenever two or more animals were weighed together, it was necessary to regard the average weight of the animals as being indicative of the grade and weight of hogs indicated on the ticket. No grade notation existed on the association records of sale to indicate whether the hogs were of Medium, Good, Choice, or other grades—the average-weight basis was the only one available. This was not altogether satisfactory for at times there are variations in grade and weight among the animals in a load which exert important influences upon price, if the load is sold as a unit. This characteristic of the price data prevented extensive analysis and the results are presented with full recognition of their limitations regarding both grade and weight.

On the basis of the analysis of consignments of more than one hog each for the 44 market days included in this study, it was determined that a total of 35,833 medium-weight (200–250 pounds) hogs were sold. Some shipments, which included animals that were docked in weight (stags and boars, for example), were not included. These shipments were, however, relatively few in number. Of these 35,833 hogs sale prices for 96.1 per cent fell within the range of daily prices for medium-weight hogs of varying grades reported at the National Stock Yards market by the market news service of the Bureau of Agricultural Economics, of the United States Department of Agriculture. Two and six-tenths per cent of the number were above the upper limit of the price range, and 1.3 per cent were below the lower limit of the price range. Prices of the latter group, constituting only 1.3 per cent of the total number, were so definitely below the lowest quoted price in most instances that it seemed fair to assume that they were low-grade hogs whose grade, condition, or other market requirements were distinctly below those of animals sold within the reported price range. These hogs were excluded from further analysis, as the evidence indi-

cated that they were definitely outside the group covered by the reported range of prices.

There remained 35,383 hogs of medium weight, which were sold on the 44 market days and which may be regarded as being of the grades reported on by the market news service since their sale prices were within or above the range of prices included in the daily reports.

Of these 35,383 animals, 2.7 per cent were price marked on the scale tickets at prices above the range of prices for medium-weight hogs quoted by the market news service as indicative of the market. Nineteen and one-tenth per cent were placed at the reported upper limit of the range of prices for this weight, 25.9 per cent within 5 cents of the upper limit, and 20.4 per cent within 10 cents of the upper limit of the range of prices reported. Only 1.3 per cent were sold at the lowest price quoted for each day for medium-weight hogs.

Analysis of lightweight hog sales during the same period gave approximately the same results. For this weight group 41.9 per cent of the hogs, which appeared to belong in the range of grades reported by the market news service, were sold within 5 cents of the highest quoted price and above. The more common range for lightweight hogs was 50 cents, and the significance of selling 41.9 per cent of the hogs of these weights at within 5 cents of the highest quoted price and above is increased by this consideration.

There are no standards of gauging cooperative efficiency in the selling of hogs by which this performance may be judged. Data regarding the relative quantities of the various grades of medium-weight and lightweight hogs sold by the association and by the market are not available, so it is not possible to state the association's position relative to sales on the market as a whole. It is evident that all hogs can not be sold at the top of the market because of variations in grade and variations in demand for the same grade throughout the daily marketing session.

SALES TO VARIOUS TYPES OF PURCHASERS

It has been stated frequently by some individuals uninformed regarding cooperative operation that, at times of heavy receipts, cooperative livestock commission associations find it necessary to increase the relative proportions of their total sales to traders or speculators. Some shippers have an impression that such sales are made to their disadvantage. The underlying assumption of those who hold this idea is that the cooperative sales organization is not equal to the task of selling to advantage the large numbers of livestock which it receives at times. This assumption was not found to be supported by the facts. As a result of the analysis it can be definitely stated that, during the 1925 period, there was no apparent relationship between the variations in the daily volume of hog receipts and the relative quantities bought by any of the groups of purchasers.

Sales records for all of the days of the year 1925 for which accounts of sale were available (274 trading days in all) were analyzed, and each individual buyer's purchases of cattle, calves, hogs, and sheep were compiled by days for the period under study. In classifying buyers the representative of the buyer was counted rather than the person represented. One buyer representative might act as agent for sev-

eral buyers. Buyer representatives were grouped according to the following classes: Large packers, small packers, butchers, order buyers, traders, farmers, and commission agencies.

In grouping, each buyer representative was given one classification only. Buyer representatives who might function either as order buyers, or as traders, or in both capacities were given a separate classification. No attempt was made to determine in which capacity such operators were functioning for each sale. Some of the results of this analysis are presented in Table 13. These sales were analyzed to determine the relative quantities sold to these groups under variations in the daily volume of sales.

TABLE 13.—*Livestock purchased by buyers of different types from the Producers Live Stock Commission Association on 274 trading days in 1925*

Type of purchaser	Cattle		Calves		Hogs		Sheep	
	Number	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*	*Number*	*Per cent*
Large packers	26,989	42.8	18,676	39.2	229,734	39.3	56,833	86.2
Small packers	6,139	9.7	476	1.0	63,325	10.8	525	.8
Butchers	3,501	5.6	861	1.8	6,004	1.0	4,769	7.2
Order buyers (exclusive)	2,362	3.7	15,970	33.6	239,785	41.0	66	.1
Order buyers and trader group	8,251	13.1	10,907	22.9	45,298	7.8	3,045	4.6
Trader (exclusive)	15,081	23.9	359	.8	85	(1)	252	.4
Commission agencies	255	.4	21	(1)	43	(1)	116	.2
Farmers	534	.8	314	.7	181	(1)	355	.5
Total [2]	63,112	100.0	47,584	100.0	584,455	100.0	65,961	100.0

[1] Less than 0.1 per cent.

[2] Total number of cattle shown in this table was 84.8 per cent of the total number of head received for sale by the association during entire year 1925. Corresponding percentages for calves, hogs, and sheep were 85, 87.4, and 83.8, respectively. Whenever one or more account sales were not available on any market day, this day was not included in this portion of the study.

There was no apparent relation between the daily volume of sales of cattle, calves, and hogs, and the percentage of the daily receipts which was sold to the trader group. The results of the analysis of the percentages of total daily sales of hogs which were sold to traders on 141 days in 1925 are presented graphically in Figure 7.[3] No significant trend was observed or any tendency to sell larger relative numbers of animals to the operators classed as traders as volume of receipts increased.

Similar charts for the exclusive-order-buyer group and the large-packer group indicated no relationship between the total daily sales and the relative quantities of hogs which were sold to purchasers of these types. The fact that analysis of the purchases by these groups indicated no definite relationship between the daily receipts of hogs and the relative quantities purchased by the large-packer and order-buyer groups supports the analysis of the purchases by the trader group. Each serves as a check against the other.

Analysis of cattle and calf sales resulted in conclusions similar to those noted for hogs.

[3] Account sales for 274 trading days in 1925 were analyzed and tabulated to obtain the totals shown in Table 13. The study of the daily sales to various types of purchasers was limited to those weeks for which the records were complete. Thus, the analysis of daily sales of cattle to various types of purchasers was based on the business of 28 complete weeks; calves on 25 weeks; hogs on 24 weeks; and sheep on 21 weeks. In all cases, the distribution of the weeks was scattered throughout the year so the sample was representative of the year's business. One hundred and forty-four trading days were contained in the 24 weeks' business on which the daily sales analysis for hogs was based. On three of these days no sales of hogs were made to the order buyer, trader, and broker group, so that 141 days' business remained to form the basis for the analysis of sales of hogs to buyer representatives of this group.

As a result of the analysis of the proportions of the total daily sales of cattle, calves and hogs, the conclusion seemed justified that the sales organization was competent to meet the demands occasioned by large volumes of business. Sales of sheep were made predominantly to one group, the large packers (Table 13), so there seemed to be no necessity for analyzing these sales to the same extent as those of cattle, calves, and hogs.

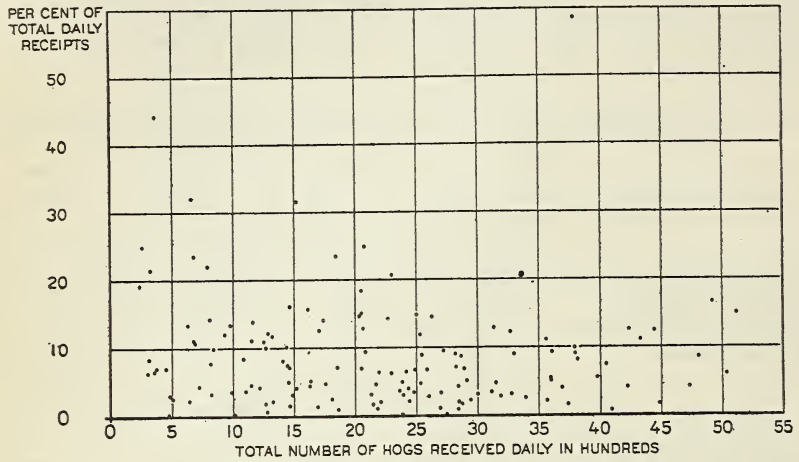


FIGURE 7.—HOGS PURCHASED DAILY FROM THE PRODUCERS' LIVE STOCK COMMISSION ASSOCIATION BY SPECIFIED AGENCIES

There was no tendency as volume of business increased for the association to sell larger quantities of hogs to operators who sometimes functioned in the capacity of traders. Agencies functioning as order buyers, traders, or in both capacities, were included. Exclusive order buyers were not included. Data for 141 trading days in 1925 are shown

VARIATIONS IN NUMBER OF BUYER REPRESENTATIVES

Further consideration of the effect of variation in daily volume of cattle sales shows that, as the volume of sales increased there was a tendency to sell to a larger number of buyers or their representatives. (Table 14.) In other words, when the total volume of sales increased, additional buyers took some of the increase. Each buyer representative was counted once regardless of the number of principals whom he may have been representing on any given day.

An analysis of the number of hog buyers resulted in the same conclusion—that the number of buyers increased when the number of animals available for sale on any day increased. On the basis of the number of buyer representatives and prices obtained by the hog sales department, the conclusion seemed justified that this organization performed its work satisfactorily on the days of heavier receipts.

TABLE 14.—*Number of buyer representatives who purchased cattle from the Producers Live Stock Commission Association on days with indicated volumes of sales*[1]

No. of buyer representative	Days on which the buyer representatives shown bought the number of head of cattle designated								
	1 to 100 head	101 to 200 head	201 to 300 head	301 to 400 head	401 to 500 head	501 to 600 head	601 to 700 head	701 to 800 head	801 to 900 head
	Days	*Days*	*Days*	*Days*	*Days*	*Days*	*Days*	*Days*	*Days*
1	8								
2	6								
3	4								
4	5								
5	5								
6	10	2							
7	7	2	1						
8	6	3							
9	10	4							
10	3	1	1	1					
11	6	5	4						
12	1	8	6	1					
13	1	6	2	3	2		1		
14	1	6	8	1	2				
15		3	7	5	5				
16		5	9	4	2	3	1		
17		1	6		3	4	2		
18		1	4	1	4	3			
19		1	2	1	2		3		
20				3	2	2	2	1	
21				1	1	1	1	1	2
22			2	3	2				
23							1		
24									
25							1		
26					1				
27					1				
28					1				
Total	73	48	52	24	28	13	12	2	2

[1] Each representative has been counted once only, regardless of number of buyers whom he was representing on any day. The period covered was 254 trading days during the year 1925.

STOCKER AND FEEDER DEPARTMENT

The association acts as purchasing agent for members and others who wish to buy stocker and feeder animals at the National Stock Yards market. Originally this function was performed for the members of the association by a separate "producers" company at National Stock Yards, which was organized under the direction of the National Live Stock Producers Association in a manner similar to the organization of the cooperative commission association. No commissions were charged on livestock purchased, since it was believed that the stock would move through the cooperative when it was returned to the market for final sale as slaughter animals. But operation of the stocker and feeder company showed that inasmuch as many of the animals purchased through the company were finally sold in other markets no financial benefit accrued to the association.

To meet this situation the stocker and feeder company was discontinued, and the purchasing of livestock for members is now done through a department of the association, and a commission is charged for livestock purchased from agencies other than the Producers Live Stock Commission Association. No commission charge for purchasing is assessed on animals which are consigned to this association and which are turned over to fill stocker and feeder orders, as this would involve a double commission charge on the same lot of animals.

The decline in the number of stocker and feeder animals (principally cattle) handled on the National Stock Yards market, is reflected in the decreased numbers of stocker and feeder animals purchased through the association. Another factor in this decline is found in the establishment of the stocker and feeder pools which are operated at present by the National Live Stock Producers Association. Part of the demand of members for stocker and feeder cattle and sheep, previously supplied through the association at National Stock Yards, has been met by the direct movement of livestock from the western ranges to the feed lots of purchasers through the pooling operations of the national association. The variation between the number of stocker and feeder cattle and calves purchased by the association's stocker

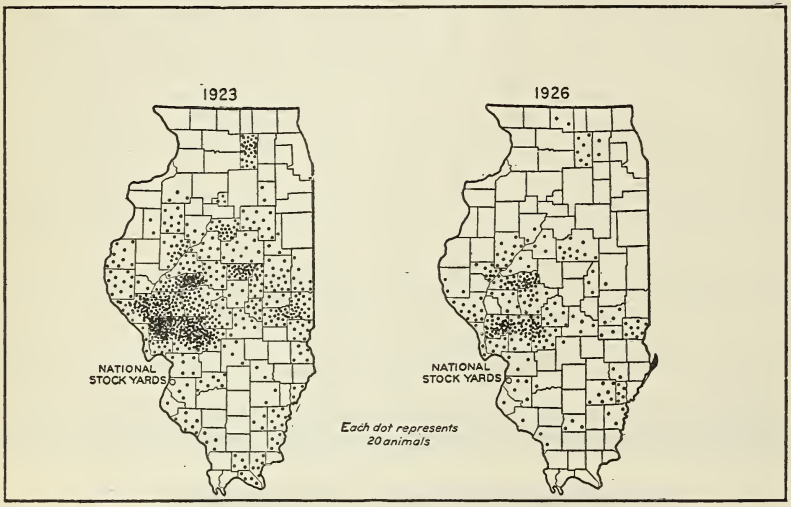


FIGURE 8.—FEEDING AREAS IN ILLINOIS OF STOCKER AND FEEDER CATTLE BOUGHT AT NATIONAL STOCK YARDS THROUGH THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION

Decreases in number of cattle and calves purchased for stocker and feeder buyers in Illinois are indicated. The period 1923 to 1926 showed a material reduction in volume of stocker and feeder cattle and calves moving from National Stock Yards; the association slightly more than maintained its stocker and feeder position relative to the market at National Stock Yards

and feeder department for Illinois buyers in 1923 and in 1926 is indidicated in Figure 8.

The decline in the volume of stocker and feeder animals handled by the association between the years 1923 and 1926 was not so great for the association as for the market as a whole, when measurement was based on the stocker and feeder shipments reported for the National Stock Yards by the market news service of the Bureau of Agricultural Economics. The association more than held its position relative to the market at a time when the number of stocker and feeder animals received at the market was declining.

The analysis developed information relative to the number of stocker and feeder buyers, the number of head of cattle purchased, and the number of years purchasers had bought animals through the association. Table 15 shows that 50 per cent of the 1926 purchasers bought in that year only, and that these purchased 39 per cent of the

total of 8,880 cattle and calves. Those who had bought continuously for the 4-year period, 1923–1926, constituted 7.8 per cent of the 1926 purchasers and bought about 21 per cent of the total number of cattle and calves purchased through the stocker and feeder department in that year.

TABLE 15.—*Purchasers of stocker and feeder cattle and calves in 1926, number of head bought in 1926, grouped according to number of years in which purchasers patronized the association's stocker and feeder department*

Years in which purchases were made	Purchasers in group		Cattle and calves purchased in 1926	
	Total	Percentage of total	Total	Percentage of total
	Number	*Per cent*	*Number*	*Per cent*
1926 only	110	50.2	3,491	39.3
1925, 1926	26	11.9	951	10.7
1924, 1925, 1926	21	9.6	932	10.5
1923, 1924, 1925, 1926	17	7.8	1,836	20.7
1924, 1926	20	9.1	562	6.3
1923, 1926	5	2.3	294	3.3
1923, 1924, 1926	12	5.5	443	5.0
1923, 1925, 1926	8	3.6	371	4.2
Total 1926	219	100.0	8,880	100.0

Further consideration of data, based on the number of 1923 patrons who were also purchasers in 1926 disclosed some interesting information relative to the turnover of patrons of this type. Of the 397 patrons of the stocker and feeder department in 1923 who bought cattle and calves, 42 purchased cattle and calves in 1926. Thus about 10.6 per cent of the 1923 patrons were also purchasers in 1926. These 42 purchasers constituted slightly over 19 per cent of the total 219 patrons of 1926. Over 50 per cent of the 1926 purchasers were new and had not bought previously through this department.

Sufficient data have been presented to indicate the high turnover of the stocker and feeder patrons, and to show the necessity for continuous effort on the part of the association in developing a new group of purchasers to replace those purchasers lost through this high turnover. An active and efficient stocker and feeder department is a means of developing more inbound business, as a satisfied purchaser of stocker and feeder animals is more likely to consign his livestock for sale to the agency from which he originally purchased his feeder stock.

Some of the stocker and feeder business of the association is carried on through the stocker and feeder pools now operated by the National Live Stock Producers Association. These pools purchase cattle and lambs on the range, on order, for buyers in the Corn Belt. Movement of the animals is thus direct from range to feed lot, without going through a terminal market. The terminal association at National Stock Yards was instrumental in starting this activity in 1925, when about 45,000 lambs were purchased for members. The success of the operation prompted the national association to take over the management of the lamb pool and to inaugurate the cattle pools.

OPERATING COSTS AND SAVINGS

Organization of a cooperative association is justified, if the operation results in some form of saving to its members, in the improvement of marketing services, or in both. Saving may take various forms. Standards for grading may be established, by means of which a price premium is obtained. Another form of saving comes through decreased costs of marketing through the farmer-owned agency as compared with the charges of the private operator; or through improving or increasing the services rendered by the marketing agency for the benefit of the farmer member without increasing the total cost to him. At least part of these objectives must be accomplished, if a cooperative is to establish itself as a permanent factor in the marketing field.

The cooperative livestock sales agency has thus far confined its selling operations largely to the terminal market at which it is located and has endeavored to obtain for its members the prevailing market price on animals consigned to it for sale and to render other efficient marketing services. It is recognized, however, that operations of the cooperative livestock sales agencies are more and more being broadened to include other marketing functions than merely those of receiving and selling livestock at the terminal market.

The Producers Live Stock Commission Association of National Stock Yards, Illinois, has reduced the cost of marketing by refunding to members a part of the commissions paid by them, and by reducing the schedule of commission charges. When the association was organized in 1922 little was known as to the volume of business it would obtain. Its working capital was borrowed. At the close of the first year's business, however, a refund of 30 per cent of the commissions on inbound business paid by members was returned as a patronage dividend.

The following year, 1923, the schedule of commission rates was reduced, as the volume of business was sufficient to allow this reduction and still permit the payment of a substantial refund to members. These reduced commission rates have been maintained up to the present time.

Refund rates have been as follows: 1923, 40 per cent of the commissions paid by each member on inbound shipments consigned to the association for sale; 1924, 25 per cent; 1925, 25 per cent; 1926 and 1927, 20 per cent.

The savings to members thus consist of (1) reduced commission rates, and (2) refunds on commissions paid by members.

Savings in the livestock commission business are principally dependent on (1) volume of business and (2) efficiency of management. The effect of variations in the volume of business upon the cost of handling a car of livestock through the association may be seen in Figure 9. The decrease in cost per car with an increased number of cars is more clearly shown because of relatively uniform monthly expenses which were incurred in the operation of the association.

With a relatively constant total monthly cost of operation, fluctuations in the volume of business are reflected in variations in the handling cost per car. This condition of relatively constant monthly total cost is expressed in the following tabulation in which the total

expense each month for the year 1927 has been expressed as a percentage of the average monthly total expense item for the year.

Expenses paid:	Per cent of 1927 monthly average
January	97. 9
February	99. 8
March	97. 5
April	95. 7
May	95. 1
June	102. 2
July	105. 3
August	100. 6
September	101. 2
October	96. 7
November	94. 0
December	113. 9

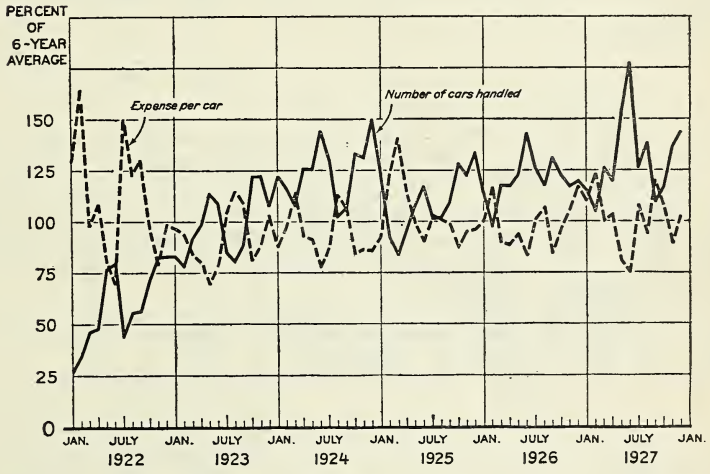


FIGURE 9.—VARIATION IN EXPENSE PER CAR AND CARLOADS OF LIVESTOCK HANDLED BY THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION

Association expense per car bears an evident relationship to the number of cars handled

The increase in December was occasioned by some annual expense items at the close of the fiscal year which, from a cost standpoint, should have been prorated to the other months, although payment was actually made in December. The general uniformity of expense is evident, however, without these adjustments.

The principal item of expense in the cooperative commission business is that incurred for salaries of office, yard, sales, and management employees. These, together, constituted slightly less than 70 per cent of the total expense. For the year 1927 the total salary expense at the terminal office was distributed as follows: January, 8 per cent; February, 8.2; March, 8.2; April, 8.4; May, 8.2; June, 8.4; July, 8.5; August, 8.6; September, 8.6; October, 8.4; November, 8.1; and December, 8.4.

Some adjustments were possible in the yard and clerical forces, depending on the variations in the volume of business, but the distribution of the salary expense throughout the year was quite constant, as was to be expected since most of the personnel of the organization must be retained throughout the year.

The percentage distribution of the income of the association, according to sources of income, is given in Table 16. The major portion of income is derived from selling commissions. In 1927 97.1 per cent of the total income was from this source. Buying commissions amounted to 1.9 per cent of the total income of the association for the year 1927, and interest earned on bonds and bank deposits amounted to 1 per cent.

TABLE 16.—*Percentage of total income of the Producers Live Stock Commission Association, received from indicated source, 1924–1927*

Source of income	1924	1925	1926	1927
	Per cent	*Per cent*	*Per cent*	*Per cent*
Selling commissions:				
Hogs	63.7	59.8	57.7	59.8
Cattle	29.3	31.8	34.7	31.6
Sheep	4.4	5.5	5.3	5.7
Buying commissions	2.1	2.0	1.7	1.9
Interest earned	.5	.9	.6	1.0
Total	100.0	100.0	100.0	100.0

Distribution of income between operating expense and savings is shown in Table 17. The percentage distribution of expenses for the association (Table 18) shows the relative importance of the various items of expense incurred in the operation of the association. Total salaries of employees at the terminal constitute the most important item—this expense item constituted, in 1927, 68 per cent of the total operating expense.

TABLE 17.—*Percentage distribution of income between operating expense and savings, 1924–1927*

Item	1924	1925	1926	1927
	Per cent	*Per cent*	*Per cent*	*Per cent*
Operating expense	67.2	73.5	70.0	70.6
Savings	32.8	26.5	30.0	29.4
Total	100.0	100.0	100.0	100.0

TABLE 18.—*Percentage distribution of expenses for the Producers Live Stock Commission Association*

Expense items	Percentage of total expenses in—				
	1923	1924	1925	1926	1927
	Per cent	*Per cent*	*Per cent*	*Per cent*	*Per cent*
Salaries at National Stock Yards:					
Clerical	20.0	19.2	17.6	18.2	18.5
Salesmen and buyers	23.8	26.9	26.5	25.4	24.8
Yardmen	19.0	18.3	18.7	20.8	20.4
Others	3.6	4.1	4.3	4.3	4.3
Other expenses:					
Advertising	2.6	3.9	5.5	5.6	5.6
Association fees	4.5	4.4	3.6	4.2	4.0
Depreciation on furniture and fixtures	.9	.7	.8	.9	1.0
Field expense [1]	11.1	10.5	11.4	9.5	10.4
Postage	4.7	3.1	2.2	1.3	1.7
Printing and stationery	3.5	2.3	1.5	1.5	1.5
Rent	1.2	1.5	1.5	1.6	2.0
Telephone and telegraph	.8	.7	.9	.9	.8
Miscellaneous	4.3	4.4	5.5	5.8	5.0
Total	100.0	100.0	100.0	100.0	100.0

[1] Includes directors' per diem, travel expense, and field per diem, as well as salaries and travel expense of regularly employed field representatives.

No significant changes in the relationships of these expense items took place during the five years 1923 to 1927. Some fluctuations were found in the percentage relationships of the items; clerical salaries were 20 per cent of the total in 1923, and 17.6 per cent of the total expense for the year in 1925.

NET EARNINGS AND SAVINGS OF THE ASSOCIATION

Monthly net earnings were determined for each of the principal departments of the business. Table 16 showed that the principal portion of the income was received from hogs. The proportion of income from this one kind of livestock indicates that a large part of the net earnings of the association probably would be derived from commissions for the sale of hogs. Figure 10 shows that this was the case. In setting up the data on which this figure was based, alloca-

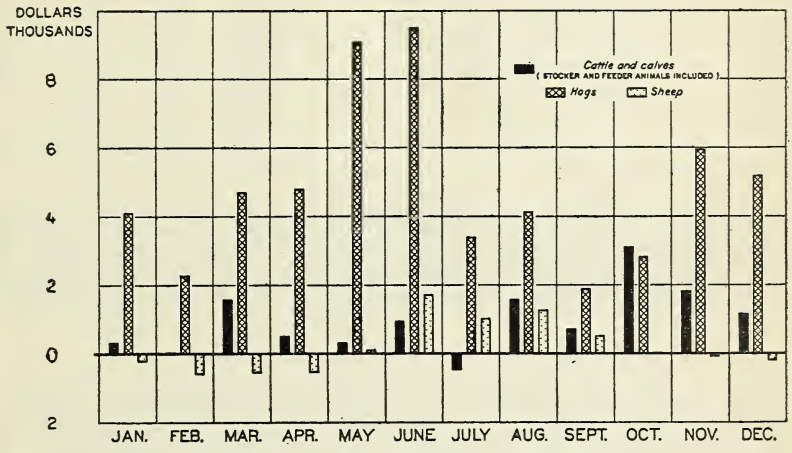


FIGURE 10.—EARNINGS OF THE PRODUCERS LIVE STOCK COMMISSION ASSOCIATION, 1927

This figure represents net earnings above cost of operation. Bars below the 0 line indicate loss. Net earnings from hog-department operation were usually greatest

tions of salaries and other expenses were made to the various species (cattle, hogs, and sheep) thus giving approximate costs of operating the sales departments for the different species for 1927. These costs were then deducted from the income received from the sale and purchase of animals of each of the species, in order to determine the net earnings for each of the departments.

In determining the net savings for each of the departments, both selling and buying commissions were used. Commissions derived from stocker and feeder purchases were credited to the cattle department, and the expenses of maintaining the stocker and feeder department were charged against the cattle department.

The percentage distribution of net earnings for the year 1927 is shown in Table 19, and determination of the earnings for the period from February, 1923, to December, 1926, did not disclose any material differences.

It is evident that over 80 per cent of the annual net earnings for the association was derived from hog transactions, 16.2 per cent from

cattle, and 3.5 per cent from sheep. For the various months of the year, the relative amounts of savings fluctuated rather widely, because of variations in the seasonal movement to market for the different species of animals.

TABLE 19.—*Percentage distribution of net earnings by months for the Producers Live Stock Commission Association, 1927*[1]

Month	Total net earnings	Percentage of monthly net earnings derived from—		
		Hogs	Cattle	Sheep
	Dollars	*Per cent*	*Per cent*	*Per cent*
January	4,178	98.2	7.4	−5.6
February	1,717	132.6	1.7	−34.3
March	5,753	81.9	27.8	−9.7
April	4,769	100.7	10.7	−11.4
May	9,541	95.4	3.5	1.1
June	12,209	78.0	7.8	14.2
July	3,968	85.5	−11.9	26.4
August	6,971	59.3	22.6	18.1
September	3,138	60.5	23.0	16.5
October	5,989	47.2	52.1	.7
November	7,702	77.3	23.6	−.9
December	6,157	84.4	19.0	−3.4
Total or average	72,092	80.3	16.2	3.5

[1] Commissions on stock received for sale and commissions on stock which were bought on order, together with commissions received from yard transactions, formed the basis for the income from which the prorated expense of operating each department was deducted. Stocker and feeder earnings and expenses were included in the calculations for the cattle department. Each item of net savings has been expressed as a percentage of the total monthly net savings. Whenever a department was operated at a loss during one month, the extent of loss is indicated by the percentage preceded by a minus (−) sign. Total distribution of net savings for each month is 100 per cent when necessary deductions have been made for losses indicated by the minus sign.

DISCUSSION AND CONCLUSIONS

This study of the Producers Live Stock Commission Association of National Stock Yards, Ill., has resulted in conclusions that the organization is well set up and that, as a cooperative sales agency, it is functioning satisfactorily in the interest of its shippers and members. An organization amply capable of meeting all demands of the terminal-market functions has been assembled, and services of a high standard are being performed for the producers of livestock.

The organization has demonstrated its ability to save its members a considerable portion of their terminal-market commission charges and from its beginning has refunded a substantial portion of the savings arising from cooperative effort to its members in the form of cash patronage dividends.

Members have thus benefited both by reduced commission charges and by the payment of patronage dividends. During the first five years of operation of the association the amounts refunded in cash totaled almost $257,000. The association has thus accomplished a reduction in the cost of marketing the livestock of its members.

The close affiliation of this associationwiththe National Live Stock Producers Association, together with a consideration of the aims and purposes of both organizations, leads to certain suggestions relative to the development trend which might be followed by those in charge of organization and of operating policies of cooperatives engaged in the marketing of livestock.

Cooperative livestock sales agencies are business service associations owned by livestock producers. As service organizations their

primary reason for existence is the efficient handling of livestock for their members. In connection with the actual buying and selling of livestock, an important obligation of these terminal associations and of their overhead organization to their producer-owners is the accumulation and dissemination of information which will form a sound basis for changes in production and marketing programs in accord with variations in economic conditions affecting the livestock industry.

Farmer-organizations operating on the scale of these associations are in a peculiarly strong position to develop this type of service. The need for educational progress along economic lines is imperative among livestock producers. The future success of these agencies will depend in a large measure upon the care with which policies are determined and the degree of success with which the organizations induce the producer to act upon the information furnished him.

Attainment of this end is dependent upon adequate research, the results of which will form the basis for determination of policies. The necessity for a research department is obvious. Although the value of economic research within business organizations has been recognized for some time by private enterprises, only recently have cooperatives ventured into this field. The members have a right to expect their cooperative organization to adopt an aggressive, forward-looking policy of development. They expect their association to initiate new methods of meeting problems of production and marketing. The association in its turn is justified in inaugurating new methods only after careful consideration based on study of the various factors for and against new policies. It is significant that several of the terminal livestock sales agencies, through the National Live Stock Producers Association, have established a department for research in the field of livestock economics.

Changing conditions surrounding livestock marketing make imperative constant effort on the part of cooperative livestock sales agencies to keep abreast of developments, or better still, in advance of them. Direct buying of hogs by packers at country concentration points is an example of a development which will continue to require much attention by stockmen's cooperative associations. It suggests that cooperative selling agencies will find it necessary to determine whether they can advantageously extend their operations into the producing areas and operate cooperatively owned concentration points under the direction of a national livestock organization.

Such problems do not solve themselves. Aggressive well-reasoned action, based on a consideration of the factors involved, must be taken by cooperative associations in dealing with problems of this character, if the organizations are to continue to be important factors in marketing. As grower-owned agencies functioning in the interests of their owners, it is incumbent upon them to initiate policies which will keep their activities in line with developments in livestock marketing. If this requires extension of their activities into the field of concentration points for livestock and in selling to points beyond the limits of the terminal stockyards, it is their duty to prepare themselves from management, financial, and legal standpoints to take the necessary steps.

A number of important activities of the livestock selling agency demand careful study in the formulation of future policies. Prominent among these are stocker and feeder cattle and lamb pools, and extension of credit to stockmen through cooperative corporations.

Both are subject to changes in the volume of business transacted as conditions in the industry appear more or less favorable to stockmen. Through properly conducted research covering the factors which influence these changes and through careful consideration of the general outlook in the livestock industry, cooperative associations will be in a position to advise their producer-owners regarding expansion or contraction of their operations.

Some of the important problems which await solution by those in charge of cooperative livestock associations deal with: (1) Cooperative concentration points; (2) extension of order-buying activities; (3) adoption of grades for livestock, and (4) coordination of the selling functions between local cooperative concentration points and terminal markets so as to render effective livestock sales service regardless of whether the livestock moves through the terminal market or direct to packers from local concentration points.

Another problem confronting these agencies is the influence of the truck in effecting changes in methods of marketing livestock. Within trucking distance of many terminal markets numerous local livestock-shipping associations have been weakened or completely disrupted through the loss of business which now moves direct from farm to market by motor truck. The problem of making the truck work for the terminal sales association is a difficult one, and the solution varies with the locality and with the circumstances existing in each locality. As truck shipments in some cases may mean a loss of business by cooperative terminal sales agencies through diversion of business to private agencies, the necessity for solution is obvious. If the solution is to have a permanent value, it must be economically sound, and must be of advantage to producer members.

Terminal sales associations are in a position to be of great assistance in meeting this problem. This solution may rest in providing adequate truck-in facilities at the terminal stockyards, in the establishment of cooperative concentration points, in the encouragement of local livestock-shipping associations to establish trucking facilities owned by the associations or under contract to them, or in any other feasible way. Irrespective of the method adopted, the livestock sales agency should be a sufficiently flexible marketing organization to adapt itself to changed conditions and to aid actively in the solution of the new problems which are continually arising.

As with every other cooperative association maintenance of contact with the individual member is a vital problem. In the case of livestock agencies, the decisive test applied by the membership is the satisfactory performance of handling and sales service. In gauging this performance, the member must have adequate information on which to base an opinion, if his conclusions are to be sound. He must be given accurate information about the functioning of the association and about its plans.

This information may be brought to the member through a field service in contact with local livestock shipping association managers and boards of directors. In this membership work the sales agency has two effective means of creating good will: (1) Through the wider contacts and the broader field of knowledge available to the marketing organization, it can aid in solving some of the problems of the local association; and (2) as it makes its contacts with these locals it has opportunity to give information about the marketing organization.

Publications aid in the development of membership contact, and good results have come from activities in furthering calf-club work among boys and girls, as has also cooperation with other agencies in the giving of livestock-grading demonstrations. The publicity field is a wide one. Intelligent testing of methods and the use of proved methods will benefit both the individual and his marketing organization.

Mention has been made of a national trade or overhead service organization whose purpose is that of coordinating the efforts of various livestock terminal sales agencies. The desirability and necessity of having an organization of this character through which all cooperative livestock sales agencies can work together is hardly open to question. It can be of service of the highest value to livestock cooperatives as well as to breeders and feeders. Some of its services have been suggested: Coordination of the activities of various sales agencies; research in livestock economics; assembling, analyzing, and dissemination of information to aid the livestock producer in adjusting his production in accord with changes in demand; advisory activity regarding the stocker and feeder programs of its members; advancing credit to stockmen in accordance with the probable trends in the livestock industry; joint action on regulatory, legislative, transportation, and other matters of common interest to livestock cooperatives and to livestock producers.

APPENDIX

AMENDED BY-LAWS

OF

PRODUCERS LIVE STOCK COMMISSION ASSOCIATION OF ILLINOIS

ARTICLE I: NAME.

SEC. 1: The name of this Association is Producers Live Stock Commission Association of Illinois.

ARTICLE II: PURPOSE.

SEC. 1: The purpose of this association is set forth in the certificate of organization and is as follows:

To be an agricultural organization instituted for the purpose of mutual help without having capital stock and not to be conducted for pecuniary profit; to promote better and more economical methods of producing and marketing livestock; to buy, handle, sell and market livestock for all its members and others; to cooperate by contract or otherwise with other associations or individuals conducting business for similar purposes; to reduce speculation, manipulation, and waste in the marketing of livestock; to register, acquire and use trade-marks and other emblems to distinguish its shipments; to enter into, make, perform, or carry out contracts with any person, firm, corporation, or association, incorporated or unincorporated; to be a body corporate and politic, with the right of succession, capable of suing and being sued; to make and enforce contracts in relation to the legitimate business of the association; to have and use a common seal and change or alter the same at pleasure; to take, hold, purchase and dispose of real and personal estate for the purpose of the organization, including holding an interest or membership in other similar organizations; to make, alter or amend by-laws not inconsistent with the constitution or laws of this State, or the United States, which by-laws, among other things, shall prescribe the duties of all officers of the association, and the qualifications of members of the association, and shall provide for regular meetings of such members at least once in five years, and for the calling of special meetings, when necessary, and for the number of members that shall constitute a quorum for the transaction of business at any such regular or special meeting; to elect directors and officers and to appoint agents, define their duties and fix their compensations; to borrow money and to mortgage or pledge its property, both real and personal to secure the payment thereof, and to have and

exercise all the powers necessary and proper to carry into effect the purpose for which such association is formed, and to do any and all things incident to the above object.

ARTICLE III: MEMBERSHIP.

SEC. 1: Membership in this association shall be limited to individuals, partnerships, associations, and corporations that are bona fide livestock producers, either as breeders or feeders, or both. An organization acting as a livestock shipping association may, through its proper officers, make application on behalf of such of its members who are bona fide livestock producers to become members of this association.

In making patronage refunds to members of this association who have become members through application of a shipping association, this association may make distribution of patronage refunds of all such members through the said shipping association. When such distribution of patronage refunds is made by the shipping association, a report of such distribution shall be returned by it to this association for record, and such distribution shall not be made until such shipping association has agreed to make patronage refunds only to persons who are members of this association.

SEC. 2: When and if requested to do so, all applicants for membership must submit evidence to the board of directors relative to his, its or their eligibility to membership in this association.

SEC. 3: (a) Any member who has ceased to be a bona fide producer of livestock or who has failed to patronize any Producer Commission Association for a period of one year shall automatically cease to be a member of this association and be dropped from this list of members.

(b) Any member, who by word or act, does, or attempts to do anything to injure the association may have his membership cancelled as provided in Article VII—Section 5.

(c) Any person who has ceased to be a member or who has had his membership cancelled shall forfeit all the rights and privileges of membership including the right to participate in the distribution of earnings or any interest he may have had in such earnings prior to the date such membership ceased.

SEC. 4: This association shall unite with the National Live Stock Producers Association in issuing a joint certificate of membership entitling the holder thereof to membership in this association, as well as the National Live Stock Producers Association. Such certificate of membership shall not be transferable and no person may acquire the same through the operation of law. If an application for membership is acted upon favorably by the board of directors, the member shall be considered a member of this association from the date of application for membership herein.

This association shall furnish to the National Live Stock Producers Association a record of all its members, but original application and original membership lists shall be kept in the records of this association.

SEC. 5: When a person entitled to membership in this association, who is a member of another terminal agency under the jurisdiction of the National Live Stock Producers Association extending equal reciprocal rights to members of this association, desires to become a member of this association and patronize this association's market agency, application for such membership herein at the time such market service is needed, may be made for and on behalf of such person by any one duly authorized by the National Live Stock Producers Association.

ARTICLE IV: VOTING POWER OF MEMBERS.

Each member of this association, regardless of the volume of livestock consigned to this association, shall be entitled to one vote and one vote only at meetings of the members.

ARTICLE V: GOVERNMENT.

SEC. 1: It is recognized by the members of this association that the problems of livestock production and marketing are national in their scope. This association being, as it is, a service corporation, desires to lawfully cooperate with other similar associations to eliminate, where possible, waste and inefficiency and to promote the general welfare of the livestock industry, its members and the public generally. To that end the directors herein provided are directed to so cooperate with other similar associations now in existence or which may hereafter be created for similar purposes.

SEC. 2: The government of this association shall be vested in a board of directors consisting of seven members elected from the membership of this association as hereinafter provided in ARTICLE XI—Sec. 1.

If a director ceases to be a bona fide livestock producer, he may continue to serve as such until the next annual election.

SEC. 3: The directors shall hold office for three years, or until their successors are elected and have qualified, and as nearly one-third shall be elected each year as possible..

The first board of directors will hold office until their successors are elected and have qualified, provided that the terms of three members shall expire in January, 1923; two in January, 1924; and two in January, 1925.

SEC. 4: In addition to their other duties, the directors shall elect all the other officers of the association and appoint the manager and other agents of this association. In the selection of the manager, the directors shall seek the advice and assistance of the directors of the National Live Stock Producers Association.

SEC. 5: Vacancies occurring in the board of directors shall be filled for the unexpired terms at any regular meeting or at any special meeting of the remaining members of the board of directors called for the purpose.

SEC. 6: Except in cases of the removal of a director or officer, as provided herein, the board of directors may submit to the members of this association specific questions for determination by the members, such specific questions to be submitted on ballots to the members and transmitted by such members to the secretary or other proper officers of this association, such ballots to be returned and counted only in the meeting at the time at which such vote is to be taken.

SEC. 7: No director shall serve as manager, salesman, or employee of this association, or for any cooperative shipping association, provided that nothing herein shall preclude directors from functioning in the performance of their duties as members of the board of directors.

SEC. 8: The National Live Stock Producers Association shall have authority to prescribe a system of keeping the accounts and other records of this association. The directors shall cause an audit of the books of the association to be made at least once in twelve months and as near the end of the calendar year as practicable.

SEC. 9: The board of directors shall, by resolution, provide the compensation for the members of the board for the time actually spent in the necessary discharge of their duties, and in addition thereto an allowance to repay the actual and necessary expenses incidental thereto.

SEC. 10: The board of directors shall require the Treasurer and all other officers, agents, and employees charged by this association with responsibility for the custody of any of its funds or property, to give a good and sufficient indemnity bond acceptable to the board of directors, in an amount determined by the board and payable to the association for the faithful performance of their duties as such—the premium upon such bond or bonds shall be paid by the association.

SEC. 11: The directors shall elect a representative to the board of directors of the National Live Stock Producers Association, who shall be a director of this association. The first director shall serve in conformity to the apportionment of the National board.

SEC. 12: Difference of opinion or disputes shall be adjusted, as far as possible, between terminal commission associations or the individual and the terminal commission association, but where this can not be accomplished, the matter shall be referred by either party to the board of directors of the National Live Stock Producers Association for action, and its decision shall be final.

ARTICLE VI: MEETINGS.

SEC. 1: The first meeting of the members of the association shall be held on the third Tuesday in January, 1923, and at least one in every five years thereafter, at the principal place of business of this association, unless the president of the board of directors shall, prior thereto, fix a different time and place.

Annual meetings of delegates to elect directors of this association shall be held as provided for in ARTICLE II at the principal place of business of this association between the hours of 10 o'clock a. m. and 3 o'clock p. m.

The new board of directors shall meet and organize for business immediately following the adjournment of the annual meeting of delegates.

SEC. 2: Special meetings of the members of the association may be called by the President, by three directors, or by twenty-five members residing in five or more counties in two or more States, on giving legal notice thereof.

SEC. 3: The board of directors shall, in addition to the annual meeting, hold regular quarterly meetings on the second Monday in April, July and October of each year, unless changed by the President upon five days' written notice.

SEC. 4: Special meetings of the board of directors may be called by the President or by three members of the board upon five days' written notice.

SEC. 5: The Secretary shall transmit a copy of the minutes of all meetings of the board of directors and of the executive committee to the National Live Stock Producers Association.

ARTICLE VII: OFFICERS.

SEC. 1: The officers of this association shall be a President, Vice President, a Secretary and a Treasurer, all of whom shall be elected annually by the board of directors. The office of Secretary and Treasurer may be held by one and the same person.

SEC. 2: No person shall be eligible to the office of President, Vice President, or Secretary-Treasurer who is not a director. The officers of the association shall constitute an executive committee and shall exercise the same powers as the board of directors between the meetings of the board.

Sec. 3: The duties of the officers of this association shall be as follows:

(a) President: The president shall preside at all meetings. He shall sign all contracts and other corporate instruments and shall perform such other duties as may be assigned to him by the board of directors.

(b) Vice President: The Vice President shall perform all the duties of the President in the latter's absence or disability; provided that upon the death, resignation, or inability of the President to act, the board of directors may declare the office vacant and elect his successor.

(c) Secretary: It shall be the duty of the Secretary to keep the record of meetings of the members, of the delegates, of the board of directors and of the executive committee. He shall keep the corporate seal of the association and affix the same to all corporate instruments issued and make the corresponding entries in a book which he shall keep for that purpose; he shall give all notices either required by law or by the by-laws of this association.

(d) Treasurer: The Treasurer of this association shall receive and keep all funds of the association not required in the daily conduct of the business, and shall pay out the same by check under proper authority of the board of directors.

SEC. 4: The board of directors in the event of any vacancy in the above offices of the association, shall elect a successor to such office at the first regular meeting subsequent to such vacancy, or at a special meeting of the board called for that purpose.

SEC. 5: At any regular, or at any special meeting called for the purpose, of the members of the board of directors, at which a majority of the board is present, any member of this association may have his membership cancelled or any director or officer of this association may be removed from office by a vote of not less than a majority of all directors.

Five days' notice of the time, place and object of any such meeting shall be mailed to the person to be proceeded against, at his last known address, stating the charges against him. At such meeting he shall have an opportunity to be heard in person, by counsel, and by witnesses in regard thereto.

ARTICLE VIII: PLACE OF BUSINESS.

The main office of this association shall be at National Stock Yards, St. Clair County, Illinois.

ARTICLE IX: QUORUM.

SEC. 1: A quorum of the board of directors shall consist of a majority of the directors and shall be sufficient to transact the business of the board.

SEC. 2: A quorum at any annual or special meeting of the members shall consist of twenty-five members and at the annual meeting of the delegates shall consist of fifteen delegates.

ARTICLE X: BONDS.

Proper indemnity and surety bonds shall be provided to furnish adequate protection to this association against loss.

ARTICLE XI: ANNUAL MEETING AND ELECTION OF DIRECTORS.

SEC. 1: On the third Tuesday in January of each year there shall be held a meeting of delegates to elect directors to succeed those whose terms have expired.

The directors shall be elected by ballot by the delegates present who shall be entitled to vote as follows:

Each shipping association whose members are members of this association shall be entitled to elect one or more delegates to represent the shipping association at all meetings of delegates of this association. Such delegate or delegates of each shipping association shall be entitled to cast one vote for each full car of livestock consigned by such shipping association to this association during the previous year.

Individual members of this association who have consigned one or more lots of livestock to this association in their own names shall be entitled to sit as delegates in meetings of delegates and shall be entitled to cast one vote and one additional vote for each full car in addition to the first lot of livestock consigned by them to this association during the previous year. It is understood that 25 head of cattle, or 75 head of calves, or 70 head of hogs or 100 head of sheep shall constitute a carload of livestock.

The call for the election shall be issued by the Secretary. Notice of such election shall be mailed to each shipping association qualified to send delegates and to each member of this associaton qualified to vote as above provided at least ten days prior to the date of election. The number of directors to be elected, together with the names of the directors whose terms expire and the names of the remaining directors, shall be contained in the call.

SEC. 2: The members of the board of directors so elected shall be apportioned to represent as fairly as possible the respective States and districts according to the volume of business contributed to this association, provided, however, that no one State shall have a majority of directors on the board.

ARTICLE XII: FEES.

SEC. 1: No membership fee shall be charged for becoming a member of this association.

SEC. 2: The Treasurer, or any one authorized to do so by the board of directors, shall set aside fifty cents (50¢) per car upon each car of livestock consigned to the association, and shall pay the same at the end of each month to the Treasurer of the National Live Stock Producers Association.

SEC. 3: With reference to the stock commonly known as "drive ins" or "truck stock" the following number of each species shall constitute a carload of livestock:

Cattle, twenty-five head;
Calves, seventy-five head;
Hogs, seventy head;
Sheep, one hundred head.

ARTICLE XIII: BENEFITS.

SEC. 1: The benefits of this association arising from the marketing of livestock shall be prorated back to the members of the association after deducting therefrom, within the discretion of the directors, the cost of shipping, receiving, marketing, feeding, watering, holding, delivering, weighing, and all other charges incident to the selling of livestock and the transaction of the business of this association, including the pro-rata share to the maintenance of the National Live Stock Producers Association, together with an amount set aside to establish a fund to constitute sufficient commercial reserves and surplus, which latter sum will be held in the treasury of this association. The surplus fund so established and maintained shall not be used for operation expenses, payment of patronage dividends or other purposes, unless authorized by the board of directors.

SEC. 2: The prorating of the benefits shall be done on the basis of the amount of paid-in commissions. Directors shall determine the amount to be refunded on each dollar of commissions paid in.

SEC. 3: Prorating of benefits to the members of this association shall be made as early as possible after the annual meeting in each year and payment shall be made as early as possible thereafter and not later than March 1st each year. The money shall be sent direct to the members of this association, except as provided for members of shipping associations in ARTICLE III, Section 1, of these by-laws.

SEC. 4: When this association shall furnish market service to persons other than members of this association, any earnings over and above cost of the actual service rendered shall be placed in a reserve fund to provide against any losses and likewise for educational activities of this association.

ARTICLE XIV: INTERCHANGEABILITY.

A member of another Producer Commission agency which is a member of the National Live Stock Producers Association, and extends the same reciprocal rights to members of this association, shall upon application for membership, be entitled to membership herein without charge of membership fee and shall be entitled to all the rights and privileges of members herein, but in no event shall his application for membership be accepted until a consignment of livestock is made by him to this association.

ARTICLE XV: FISCAL YEAR.

The fiscal year of this association shall begin on the first of January and end on the 31st of December of each year.

ARTICLE XVI: RULES AND REGULATIONS.

Rules and regulations, in addition to these by-laws, may be adopted by the board of directors, which shall be binding upon the members hereof. The board of directors of this association shall adopt rules and regulations for this association in conformity to the rules and regulations of the National Live Stock Producers Association. Rules and regulations promulgated by the National Live Stock Producers Association shall be submitted to the board of directors of this association and, when approved, be binding upon the members of this association.

ARTICLE XVII: LIMITATION OF POWERS.

The powers of all officers and agents of this association are limited powers and any acts of officers or agents in excess of their authority shall not be binding upon this association.

ARTICLE XVIII: LIABILITY.

The board of directors shall have no power to make assessments upon the members of this association for any purpose whatsoever.

ARTICLE XIX: DEFICITS.

All reserve and surpluses of this association created from earnings of members or nonmembers shall be subject to the meeting of any deficit that may be created in the operation of this association during the fiscal year.

ARTICLE XX: ORDER OF BUSINESS.

The order of business at all meetings of the board of directors shall be as follows:

1. Roll call.
2. Reading of minutes of last meeting.
3. Consideration of communications.
4. Resignations and elections.
5. Reports of officers and employees.
6. Reports of committees.
7. Unfinished business.
8. Original resolutions and new business.
9. Adjournment.

ARTICLE XXI: AMENDMENT.

These by-laws may be altered, amended or repealed at any regular meeting of the members or of the board of directors, or at any special meeting of the members or of the board of directors called for that purpose, by a two-thirds vote of the members or of the board who are present at the meeting. All amendments shall first be approved by the directors of the National Live Stock Producers Association.

ORGANIZATION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE

November 15, 1929

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This circular is a contribution from

Bureau of Agricultural Economics	NILS A. OLSEN, *Chief.*

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